



NOAA Technical Memorandum NMFS

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DECEMBER 2004

MARINE MAMMAL DATA COLLECTED DURING A SURVEY IN THE EASTERN TROPICAL PACIFIC OCEAN ABOARD THE NOAA SHIPS *McARTHUR II* AND *DAVID STARR JORDAN*, JULY 29 - DECEMBER 10, 2003

Alan Jackson, Tim Gerrodette, Susan Chivers,
Morgan Lynn, Paula Olson, Shannon Rankin

National Marine Fisheries Service, NOAA
Southwest Fisheries Science Center
La Jolla Laboratory
8604 La Jolla Shores Drive
La Jolla, CA 92037

NOAA-TM-NMFS-SWFSC-366

U.S. DEPARTMENT OF COMMERCE

Donald L. Evans, Secretary

National Oceanic and Atmospheric Administration

VADM Conrad C. Lautenbacher, Jr., Undersecretary for Oceans and Atmosphere

National Marine Fisheries Service

William T. Hogarth, Assistant Administrator for Fisheries

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INTRODUCTION

In 1997 the U.S. Congress directed the Secretary of Commerce to determine whether the chasing and deployment of purse seine nets around dolphins during tuna fishing operations in the eastern tropical Pacific Ocean (ETP) was having a significant adverse impact on any depleted dolphin stock (International Dolphin Program Conservation Act, Public Law 105-42). A portion of this mandate directed the National Marine Fisheries Service to undertake three field surveys between 1998 and 2000 to estimate the current abundances of the populations of dolphins in the area affected by the fishery.

Among other results, analysis of data from the 1998-2000 cruises indicated that ETP dolphin populations were not recovering as expected (SWFSC 2002). Accordingly, the Southwest Fisheries Science Center plans to carry out a cruise every three years to monitor the dolphin populations affected by the fishery. The 2003 *Stenella* Abundance Research project (STAR03) was the first of these continuing cruises.

This report summarizes the survey procedures and data for marine mammals during the STAR03 cruise. Ecosystem studies conducted during STAR03 will be summarized in separate reports. Marine mammal data on STAR cruises from 1998-2000 were summarized in Kinzey et al. (1999, 2000, 2001). These reports and additional details about the project are available at <http://swfsc.nmfs.noaa.gov/prd/PROJECTS/star/>.

The SWFSC has conducted research on the cetacean populations of the ETP since the mid-1970s. The line-transect field methodologies in current use were originally established for the five-year "Monitoring of Porpoise Stocks" (MOPS) program of surveys the SWFSC completed between 1986 and 1990. MOPS produced estimates of abundance over this five-year period for 24 stocks of cetaceans representing 19 species or genera (Wade and Gerrodette 1993). The MOPS program also produced annual estimates for the four species of dolphins (*Stenella attenuata*, *S. longirostris*, *S. coeruleoalba*, and *Delphinus delphis*) believed to be most affected by the fishery (Wade and Gerrodette 1992). The STAR cruises resulted in estimates of coastal and northeastern offshore stocks of spotted dolphins (Gerrodette and Forcada 2002a), as well as selected other species less affected by the fishery (Gerrodette and Forcada 2002b). Additional information regarding the abundance of stocks of dolphins taken by the fishery is available through analysis of sighting data from the tuna vessels (Anganuzzi and Buckland 1994), although these data contain biases that vary in time (Lennert-Cody et al. 2001).

The STAR03 survey was conducted using the two NOAA ships *McArthur II* and *David Starr Jordan* (hereafter referred to as the *Jordan*) with cruise numbers assigned as follows:

McArthur II, AR-03-04: SWFSC Cruise Number 1623
Jordan, DS-03-06: SWFSC Cruise Number 1624

SURVEY OBJECTIVES

The primary objective of the study was to estimate abundances of the dolphin stocks affected by the ETP purse-seine fishery for yellowfin tuna (*Thunnus albacares*). The survey's design targeted the depleted stocks of eastern spinner dolphins (*Stenella longirostris orientalis*) and the northeastern offshore stock of spotted dolphins (*Stenella attenuata*). In addition to data suitable for line-transect analysis, behavioral, acoustic, photogrammetric, genetic, morphological, and individual whale identification data were collected on the region's cetaceans and are described in this report.

STUDY AREA

The study area extended from the U.S.-Mexico border, south to the territorial waters of Peru, bounded on the east by the continental shores of the Americas, and to the west by Hawaii (roughly from 30° north to 18° south out from the coastline to 153° west; see Fig. 1 and Appendix A). This area is the same as that covered during the 1998-2000 surveys and approximately the same covered by the 1986-1990 MOPS surveys. Examination of dolphin sightings from research and fishing vessels indicated that this region encompasses the entire distribution of the dolphin stocks most affected by the fishery (Gerrodette et al. 1998). The study area was divided into three sampling strata that received different levels of survey effort: the core area, the outer area, and the coastal area (Fig. 1). The strata for the 2003 survey were the same as for the 1998-2000 surveys, except that the western boundary of the core area was shifted to the west to include more of the range of the eastern spinner dolphin. The coordinates of the westernmost boundary point of the core area were 10° north and 125° west (Fig. 1).

ITINERARY

The survey began on July 29 and ended on December 10, 2003. It was composed of five legs on the *McArthur II* and six legs on the *Jordan*. Survey legs varied between 13 and 29 days in length, separated by 3 to 10 days in port. The itineraries for the ships are listed below.

NOAA Ship *David Star Jordan*:

31 JUL	Depart San Diego, CA
31 JUL - 16 AUG	Leg I
17 AUG - 19 AUG	Manzanillo, Mexico
20 AUG - 06 SEP	Leg II
07 SEP - 16 SEP	Acapulco, Mexico
17 SEP - 29 SEP	Leg III
30 SEP - 06 OCT	Puntarenas, Costa Rica
07 OCT - 23 OCT	Leg IV
24 OCT - 27 OCT	Puerto Quetzal, Guatemala
28 OCT - 17 NOV	Leg V
18 NOV - 21 NOV	Manzanillo, Mexico
22 NOV - 09 DEC	Leg VI
10 DEC	Arrive San Diego, CA

NOAA Ship *McArthur II*:

	29 JUL	Depart San Diego, CA
29 JUL - 26 AUG		Leg I
27 AUG - 04 SEP		Honolulu, Hawaii
05 SEP - 29 SEP		Leg II
30 SEP - 06 OCT		Puntarenas, Costa Rica
07 OCT - 27 OCT		Leg III
28 OCT - 30 OCT		Callao, Peru
31 OCT - 14 NOV		Leg IV
15 NOV - 18 NOV		Panama City, Panama
19 NOV - 08 DEC		Leg V
	10 DEC	Arrive San Diego, CA

SCIENTIFIC PERSONNEL

The scientific complement per leg included 15 to 16 scientists aboard the *Jordan* and 12 to 15 aboard the *McArthur II*. Appendix B lists the scientists and ship/legs on which they participated.

Two six-person teams of marine mammal observers rotated between the ships. Each team spent three legs on the *Jordan* so that their estimates of school size could be calibrated with photogrammetric counts of school size taken from the helicopter. Additionally, the *Jordan* had two photogrammetrists and the *McArthur II* had two acousticians per legs 3-5. Data collected by birders and oceanographers aboard each vessel will be summarized in separate reports, as noted in the introduction.

EQUIPMENT AND PROCEDURES

Line-Transect Survey

Line-transect procedures (Buckland et al. 1993) developed at SWFSC for estimating absolute abundances of cetaceans were followed during the survey. The *McArthur II* and *Jordan*, 68.3 m and 52.1 m in length, respectively, maintained cruising speeds of approximately 18.5 km/hr (10 knots) along pre-determined tracklines (Figures 1-3) while actively searching for marine mammals ("on effort" mode). Observers conducted a visual watch for marine mammals during daylight hours (approximately 0600 to 1800) using two 25 X 150 power binoculars mounted on the port and starboard sides of the ship's flying bridge. For each marine mammal sighting, bearing (using an azimuth ring on the binocular mount to measure angle) and distance (using a reticle scale inscribed in the eyepiece) were recorded, along with the initial sighting cue and related information.

Six observers on each ship rotated through three watch positions: port binocular, center observer/data recorder, and starboard binocular. Observers shifted positions every 40 minutes. At least one identification specialist with previous experience in the ETP was on watch at all times.

Total binocular height above the water for the *McArthur II* was 15.2 meters, giving a maximum ship-to-horizon sighting distance of approximately 13.9 km (7.5 nm). On the *Jordan*, total binocular height above the water was 10.7 meters, giving a maximum ship-to-horizon sighting distance of approximately 11.7 km (6.3 nm). Two additional mounted 25 X 150 binoculars were available on both ships for periodic use during sightings (but not during searching mode).

Sighting data were collected by the three observers in the three watch positions on each ship. No information from other observers or binocular positions was relayed to this primary team during searching effort. The observer at the port binocular surveyed the area between the trackline and 90° left of the trackline. The observer at the starboard binocular surveyed the area between the trackline and 90° right of the trackline. Using unaided eye and a handheld 7X binocular, the center observer searched the entire 180° forward of the ship, with effort focused on the trackline and the area from the ship out to about 400 meters (the "blind" area for observers using the 25X binoculars).

The center observer also served as the data recorder and entered sighting, weather and effort information into a laptop computer on the flying bridge using the SWFSC software program "WinCruz". The computer was linked to the ship's global positioning system to record time and position for every event entered by the recorder such as a sighting or effort change, or automatically every 10 minutes if no other event had been entered.

When a sighting was made, searching effort was typically suspended (i.e., "off effort") and the ship entered "closing" mode with variable speeds and courses in order to approach the mammals. Schools were approached if they were within three nautical miles perpendicular to the trackline. Observers identified cetaceans to the level of species/stock when possible, and then made independent estimates of school size. If more than one taxon was present, percent composition of the school was estimated independently by each observer. Sightings of new schools made while in closing mode were recorded as off-effort sightings. While in closing mode, ancillary projects such as photo-identification and skin biopsy sampling might be conducted.

Upon completion of activities associated with the sighting, the ship returned to searching mode on a course parallel to the original trackline unless this was greater than 10 nm (18.5 km) from it, in which case the ship resumed searching on a 20° course back to the original trackline. If a school that had been previously recorded as an off-effort sighting during closing mode was resighted during searching, it was recorded as an on-effort sighting.

Acoustics

An abbreviated acoustics program was undertaken during legs 3, 4, and 5 of the STAR03 survey, with the intention of testing the performance of the *McArthur II* as a research platform for cetacean acoustics. The goals were (1) to gather additional information to determine whether acoustics can aid in the estimation of dolphin distribution and abundance; (2) to gather additional information on the range of acoustic detection of

sperm whales (*Physeter macrocephalus*); and (3) to examine the geographic variation of Bryde's (*Balaenoptera edeni*) and blue whale (*B. musculus*) vocalizations. Two procedures were used to gather these data: continuous monitoring and recording of dolphin and sperm whale vocalizations obtained from a towed hydrophone array on the *McArthur II*, and opportunistic deployment of sonobuoys for recording baleen whales from both the *McArthur II* and the *Jordan*. Additionally, opportunistic recordings of odontocetes were made on the *Jordan* using a bow-mounted hydrophone.

A two-element hydrophone array was towed 300 m behind the *McArthur II* during daylight hours. This array was built in-house, and the hydrophones have internal pre-amplification and sensitivity from 500 Hz to 25 kHz (± 10 dB). The array was monitored for cetacean vocalizations aurally and visually, using a spectrographic display, and clear cetacean sounds were recorded on a Tascam DA-38 multi-channel recorder at 48 k samples/sec. Real-time spectrographic displays of sounds were monitored using ISHMAEL software, which allows for localization of vocalizing animals via phone-pair (cross-correlation) algorithms. Successive angles to sound sources obtained using these methods were plotted to a mapping program, Whaltrak. Information regarding sperm whale detections was not shared between the acoustic and visual teams until the animals had clearly passed abeam of the vessel to allow for independent observation of this species by both teams.

Opportunistic deployments of Navy-surplus sonobuoys were made from both ships to record cetacean sounds not easily obtained using the hydrophone array. Sonobuoys (type 53 or type 57) were typically deployed within 500 m of Bryde's and blue whales. Sonobuoy signals were received using a 2-channel ICOM receiver and recorded to a Sony DAT recorder. Sounds were monitored aurally and visually using a scrolling spectrographic display.

A 3-element bow hydrophone was attached to the bow bubble of the *Jordan*, and allowed for recording vocalizations of odontocetes in close proximity to the bow of the ship (primarily bow-riding dolphins).

Photo-Identification and Biopsy Studies

Digital and 35 mm photographs of cetacean schools and individuals were taken to assist with stock delineations and for studies utilizing identifiable individual whales to determine stock movement or, for some whale species such as blue whales, as an alternative means of estimating population sizes. These studies were often conducted in conjunction with biopsy sampling using a hollow-tipped dart fired from a crossbow to obtain a small sample of skin for genetic analysis. Both photography and biopsy sampling were conducted either from the bow of the ship or from a small boat with outboard engine.

Aerial Photogrammetry

Helicopter operations were conducted from the *Jordan* in order to obtain photographs of dolphin schools for calibrating observer estimates of school size, for measuring total body length for cetacean species, and for enumerating pinniped and seabird colonies. Flights were made in the morning and afternoon during optimal weather conditions: clear skies and sea state below Beaufort 4. All mammal observers on the vessel made estimates of school size and taxonomic composition for these calibration schools.

Behavior

Behavioral data collection emphasized dolphin schools and focused on behaviors that would indicate reactions to the vessel. The data included information on (1) group behavior, (2) school size and shape, (3) reactions to the research vessel, and (4) an estimate by the observer of whether the overall reaction of the school to the research vessel was evasive, non-evasive, both, or unknown. These data were collected using minor modifications to the additional data fields on the Marine Mammal Sighting Form that were initiated with the 1999 survey.

RESULTS

Line-transect Observations

A total of 26,200 kilometers of trackline were surveyed by the two ships during 207 ship days of on-effort searching. The daily record of kilometers surveyed by each ship is reported in Table 1. An average of 127 km (69 nm) of trackline was searched per ship per on-effort day. Figure 1 depicts the locations of the combined tracklines. Tracklines completed individually by the *McArthur II* and the *Jordan* and are depicted in Figures 2 and 3, respectively. The *McArthur II* surveyed the most offshore and southern portions of the study area, while the *Jordan's* tracklines were concentrated in the core area.

A total of 1586 sightings of marine mammals were made during the survey: 757 from the *Jordan* and 829 from the *McArthur II*. Of this total, 1359 sightings were on-effort, made during searching mode by the on-duty observers. Table 2 reports the times, locations, average estimated school size, and related information for each sighting, organized by sighting category (a single species, stock, or more general category such as "unidentified dolphin"). Table 3 summarizes the total numbers of sightings detailed in Table 2. Maps depicting the geographic positions for all marine mammal sightings are displayed in Figures 4-27.

The number of sightings in Table 3 is tabulated by the number of "pure" (single sighting category) and "mixed" (multiple category) schools. Seventy-eight percent of all schools were pure schools. The total of 1784 pure and mixed sightings in Table 3 exceeds the actual number of sightings by 198 because mixed sightings are counted separately in the table for each category recorded in the sighting.

The most common sighting categories were striped dolphin (*Stenella coeruleoalba*) and offshore spotted dolphin, each found in about 10% of the total schools (Table 3). These two categories were followed closely by bottlenose dolphin (*Tursiops truncatus*) and unidentified dolphin, each found in about 9% of the schools. Striped dolphins tended to be found in pure schools averaging just over 50 individuals while offshore spotted dolphins were usually in larger, mixed schools.

The most commonly encountered species of large whales were Bryde's whale and blue whale at 3% and 2% of all sightings, respectively. In addition to the 47 confirmed sightings of Bryde's whale there were 33 sightings of whales that were either Bryde's or sei whales that could not be identified to species.

The different kinds of mixed sighting-category schools recorded during the survey are shown in Table 4. One hundred eighty-eight schools were mixed. The most common of these, 32% of all mixed schools, was comprised of the two target stocks, offshore spotted dolphin and eastern spinner dolphin. The second most common type of mixed school, 13% of all mixed schools, was comprised of offshore spotted dolphin and the whitebelly stock of spinner dolphin (*Stenella longirostris* hybrid).

The overall sighting rate was 51.8 sightings per 1000 km (Table 5). Sighting rates were influenced by sea state and swell height (Table 5).

Acoustics

The hydrophone array was towed and monitored for approximately 9,274 km (5,008 nm).

Recordings from the towed hydrophone array included vocalizations from short-beaked common dolphin (*Delphinus delphis*), long-beaked common dolphin (*D. capensis*), spinner dolphin (*Stenella longirostris*), spotted dolphin (*S. attenuata*), striped dolphin (*S. coeruleoalba*), bottlenose dolphin (*Tursiops truncatus*), rough-toothed dolphin (*Steno bredanensis*), Risso's dolphin (*Grampus griseus*), false killer whale (*Pseudorca crassidens*), dusky dolphin (*Lagenorhynchus obscurus*), pilot whale (*Globicephala* sp.), minke whale (*Balaenoptera acutorostrata*), humpback whale (*Megaptera novaeangliae*), and sperm whale (Table 6). All non-sighted acoustic detections, with the exception of sperm whales, humpback whales and minke whales were "unidentified dolphins". Plots of sighted dolphin schools (Fig. 28) and non-sighted dolphin schools (Fig. 29) are plotted with the acoustic effort track.

Recordings from the bow hydrophone on the *Jordan* included short-beaked common dolphin, spinner dolphin, spotted dolphin, bottlenose dolphin, rough-toothed dolphin, Risso's dolphin, false killer whale, Pacific white-sided dolphin (*L. obliquidens*), pilot whale, killer whale (*Orcinus orca*), and Baird's beaked whale (*Berardius bairdii*) (Table 7).

There were a total of 24 visual and/or acoustic detections of sperm whales while the acoustics team was on effort; sixteen of these were detected by the acoustics team only

(Fig. 30). One of the visual sightings was not detected by the acoustics team. In addition, there were numerous recordings of non-sighted humpback whales in the southern region of the study area, and of non-sighted minke whales in the northern region of the study area (Fig. 30).

A total of 56 sonobuoys were deployed from the ships, of which 44 were successful (Table 8 *McArthur II*, Table 9 *Jordan*). Sonobuoy recordings were made of blue whales, Bryde's whales, Bryde's/sei whales, sei whales, fin whales, sperm whales, humpback whales, pilot whales, killer whales, and Fraser's dolphins. Not all recordings contained vocalizations of the target species.

Digital and 35 mm Photography

Four hundred ninety-seven cetacean schools were photographed (Table 10). One hundred twenty-eight of these contained various stocks of spotted and spinner dolphins, or both. Photographs of individually identifiable whales that will be submitted to existing ID catalogs were obtained from a total of 49 different sightings (Table 11). These include 21 sightings of blue whale (24 whales), 12 sightings of humpback whale (30 whales), 7 sightings of killer whale (62 whales), and 9 sperm whale sightings (17 whales).

Aerial Photogrammetry

Tables 12 and 13 summarize the photogrammetry results obtained by the helicopter on the *Jordan*. A total of 122 schools were photographed, of which 37 were used to calibrate observer estimates of school size. Twenty spotted, 4 spinner, 11 mixed spotted/spinner, and 19 striped dolphin schools were photographed in the combined calibration and other aerial photogrammetric studies.

Biopsy Sampling

Skin biopsy samples were obtained from 574 individual cetaceans representing 25 species or stocks (Tables 14 and 15). For spotted dolphin, biopsies from the northeast stock, spotted schools unidentified to stock, and the coastal stock totaled 63, 11, and 102 samples, respectively. For spinner dolphin, the eastern stock, Central American stock, unidentified stock, and eastern or Central American stock were represented by 35, 7, 24 and 12 samples, respectively. No samples were obtained from the hybrid or "whitebelly" form of spinner dolphin.

Behavior

Behavioral data regarding cetacean responses to the survey ships was collected for 807 sightings (Table 16), or 45% of all sightings. Most notably, these data were collected for 80% of the target species sightings.

ACKNOWLEDGEMENTS

We are indebted to the officers and crews of the research vessels *Jordan* and *McArthur II*, whose experience and professional support made this survey possible. We also thank LTJG Jason Appler, who handled shore-based logistics and cruise administration, as well as Barb Engstrand, Karen Handschuh, Gaye Holder, Ginny Hostler, Bobbi Watkins, and Ron Whyte of the administrative support staff at the Southwest Fisheries Science Center. Robert Holland created the data collection software. Sarah Mesnick and Anne Allen designed the behavioral study. Jim Gilpatrick assisted in summarizing the photogrammetric results. Summer Martin produced the geographical plots. We are grateful to Michael Tillman and Richard Neal of the Director's Office, and Stephen Reilly of the Protected Resources Division at SWFSC for their continued support of the research. Finally, we thank the chief scientist, Lisa Ballance, the cruise leaders on the various legs of the cruise, and the marine mammal observers, photogrammetrists and acousticians who collected the data summarized in this report.

For further information about these data contact the following: marine mammal sightings, Tim Gerrodette; acoustics, Jay Barlow; aerial photogrammetry, Wayne Perryman; genetics, Barb Taylor; 35 mm and digital photographs, Paula Olson.

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Table 1. Kilometers of survey effort during STAR03, per ship per day.

<i>Date</i>	<i>McArthur II</i>	<i>Jordan</i>	<i>Date</i>	<i>McArthur II</i>	<i>Jordan</i>
29 Jul 03	0.3	0.0	20 Sep 03	117.0	161.2
30 Jul 03	152.4	0.0	21 Sep 03	197.1	156.4
31 Jul 03	163.2	18.7	22 Sep 03	123.2	132.5
1 Aug 03	128.5	200.4	23 Sep 03	114.4	140.5
2 Aug 03	232.6	111.3	24 Sep 03	158.0	71.4
3 Aug 03	223.4	96.3	25 Sep 03	149.9	151.1
4 Aug 03	214.7	175.7	26 Sep 03	104.8	63.5
5 Aug 03	154.9	125.5	27 Sep 03	116.4	80.5
6 Aug 03	135.7	206.2	28 Sep 03	130.3	101.4
7 Aug 03	148.4	110.3	29 Sep 03	72.9	109.9
8 Aug 03	150.5	115.1	7 Oct 03	104.6	7.8
9 Aug 03	195.8	64.0	8 Oct 03	137.8	4.4
10 Aug 03	166.8	134.8	9 Oct 03	144.5	98.6
11 Aug 03	188.7	115.8	10 Oct 03	130.9	122.0
12 Aug 03	106.7	119.7	11 Oct 03	150.4	89.7
13 Aug 03	127.9	122.6	12 Oct 03	131.1	81.7
14 Aug 03	111.0	125.2	13 Oct 03	137.7	131.8
15 Aug 03	116.8	118.0	14 Oct 03	128.0	57.0
16 Aug 03	184.1	121.8	15 Oct 03	126.3	85.5
17 Aug 03	185.0	0.0	16 Oct 03	166.5	129.9
18 Aug 03	140.2	0.0	17 Oct 03	184.0	113.1
19 Aug 03	134.2	0.0	18 Oct 03	182.7	184.1
20 Aug 03	120.9	51.4	19 Oct 03	187.2	97.3
21 Aug 03	173.2	85.4	20 Oct 03	116.3	0.0
22 Aug 03	190.7	117.1	21 Oct 03	110.5	116.8
23 Aug 03	162.4	147.5	22 Oct 03	143.6	149.3
24 Aug 03	202.7	183.4	23 Oct 03	202.4	131.6
25 Aug 03	235.1	190.6	24 Oct 03	153.6	0.0
26 Aug 03	159.6	185.6	25 Oct 03	166.9	0.0
27 Aug 03	0.0	51.7	26 Oct 03	212.3	0.0
28 Aug 03	0.0	105.8	28 Oct 03	0.0	102.1
29 Aug 03	0.0	179.4	29 Oct 03	0.0	115.9
30 Aug 03	0.0	109.4	30 Oct 03	0.0	122.5
31 Aug 03	0.0	96.7	31 Oct 03	63.6	106.1
1 Sep 03	0.0	134.5	1 Nov 03	125.5	163.8
4 Sep 03	0.0	151.2	2 Nov 03	74.7	163.2
5 Sep 03	79.2	183.5	3 Nov 03	115.8	153.1
6 Sep 03	0.0	146.4	4 Nov 03	104.9	54.3
7 Sep 03	1.1	0.0	5 Nov 03	136.2	164.1
8 Sep 03	144.2	0.0	6 Nov 03	130.3	156.2
9 Sep 03	165.9	0.0	7 Nov 03	138.3	149.7
10 Sep 03	135.1	0.0	8 Nov 03	105.7	77.4
11 Sep 03	79.7	0.0	9 Nov 03	133.4	69.0
12 Sep 03	150.6	0.0	10 Nov 03	0.0	123.4
13 Sep 03	159.9	0.0	11 Nov 03	63.7	118.0
14 Sep 03	156.2	0.0	12 Nov 03	95.2	135.2
15 Sep 03	217.0	0.0	13 Nov 03	98.7	139.7
16 Sep 03	193.1	0.0	14 Nov 03	65.8	154.0
17 Sep 03	143.3	22.6	15 Nov 03	0.0	151.2
18 Sep 03	55.2	42.8	16 Nov 03	0.0	152.8
19 Sep 03	159.5	65.2	17 Nov 03	0.0	120.5

Table 1. Survey effort (continued).

<i>Date</i>	<i>McArthur II</i>	<i>Jordan</i>
19 Nov 03	60.6	0.0
20 Nov 03	115.0	0.0
21 Nov 03	66.8	0.0
22 Nov 03	62.2	88.1
23 Nov 03	28.1	123.2
24 Nov 03	51.3	146.4
25 Nov 03	43.1	118.5
26 Nov 03	68.8	180.9
27 Nov 03	111.9	88.7
28 Nov 03	163.0	168.6
29 Nov 03	190.0	136.0
30 Nov 03	158.0	169.0
1 Dec 03	147.7	157.9
2 Dec 03	87.9	0.0
3 Dec 03	165.4	138.2
4 Dec 03	162.2	202.3
5 Dec 03	127.5	136.0
6 Dec 03	89.3	76.5
7 Dec 03	93.7	151.2
8 Dec 03	27.5	36.9
9 Dec 03	0.0	69.7
Total	14219.4	11980.7

Table 2. Marine mammal sightings during STAR03 for each sighting category. "Other Codes" column indicates the other sighting categories (see Appendix C) in a mixed-species school. Times are local. School size is the uncalibrated mean of the observers' best estimates of school size. Sighting numbers less than 1000 were made from the *McArthur II*, those over 1000 were made from the *Jordan*.

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft No.	Obs No.	School Size	Ef- fort
<i>Mesoplodon peruvianus</i>										
001		429	23 Oct 03	1523	S15:25.49	W087:05.50	4	126	1	On
001		616	22 Nov 03	1445	N08:29.00	W086:10.89	3	126	1	Off
001		622	22 Nov 03	1714	N08:25.33	W086:24.86	1	126	2	Off
001		678	24 Nov 03	1617	N09:54.04	W091:01.03	1	126	1	On
001		726	26 Nov 03	1647	N08:07.95	W096:07.78	2	224	1	Off
<i>Stenella attenuata</i> (offshore)										
002		45	8 Aug 03	0811	N08:53.05	W126:48.94	4	7	57	On
002		49	8 Aug 03	1627	N07:47.08	W126:46.77	4	7	72	On
002 013		52	8 Aug 03	1838	N07:35.36	W126:51.77	4	230	49	On
002 010		69	11 Aug 03	1617	N10:50.77	W131:29.62	5	228	66	On
002		76	12 Aug 03	1746	N13:10.26	W133:43.28	3	230	123	On
002 011		77	12 Aug 03	1813	N13:13.93	W133:44.67	2	125	220	On
002 011		79	13 Aug 03	0826	N14:16.35	W134:55.49	3	208	343	On
002 011		83	13 Aug 03	1622	N14:59.02	W135:49.31	3	125	233	On
002		85	13 Aug 03	1702	N14:54.66	W135:50.90	3	230	5	On
002 013		88	14 Aug 03	0917	N12:55.57	W136:18.29	1	7	55	On
002 011		89	14 Aug 03	1011	N12:49.30	W136:19.25	1	208	316	On
002 011 013 077		91	14 Aug 03	1128	N12:40.65	W136:23.62	2	208	304	On
002 011 072		98	14 Aug 03	1846	N11:52.75	W136:28.68	4	1	525	On
002 011		101	15 Aug 03	0832	N10:32.74	W136:52.62	2	125	135	On
002 011		103	15 Aug 03	0953	N10:20.20	W136:53.28	2	208	48	Off
002 011 077		120	18 Aug 03	0649	N06:34.55	W140:07.65	4	7	117	On
002		122	18 Aug 03	1057	N07:02.20	W140:32.08	4	208	32	On
002 011		123	18 Aug 03	1116	N07:06.40	W140:32.42	4	7	78	On
002 011		124	18 Aug 03	1236	N07:16.84	W140:37.44	4	208	83	On
002 011		125	18 Aug 03	1429	N07:28.17	W140:49.40	4	228	162	On
002 011		127	18 Aug 03	1626	N07:31.43	W141:01.12	3	125	197	On
002 011		130	19 Aug 03	0757	N08:48.88	W142:12.56	3	208	82	On
002		133	19 Aug 03	1018	N09:01.14	W142:22.23	4	7	39	On
002		140	19 Aug 03	1814	N09:45.91	W143:20.77	2	208	12	On
002 011		145	20 Aug 03	1033	N08:51.39	W145:05.90	2	1	157	On
002 011		146	20 Aug 03	1119	N08:49.85	W145:12.90	1	208	260	On
002		148	20 Aug 03	1141	N08:49.67	W145:11.81	1	231	12	Off
002		166	21 Aug 03	1230	N07:10.02	W148:00.78	4	228	121	On
002		168	22 Aug 03	1618	N07:48.16	W150:22.50	4	7	68	On
002		169	23 Aug 03	0932	N09:52.93	W151:23.69	4	230	18	On
002		171	24 Aug 03	1609	N14:05.09	W153:36.21	5	125	34	On
002		173	26 Aug 03	0751	N19:19.91	W156:50.03	4	230	10	On
002 003		179	26 Aug 03	1547	N20:32.73	W157:05.44	4	125	80	On
002 003		185	5 Sep 03	1040	N19:06.67	W156:15.56	4	228	86	On
002		188	9 Sep 03	1306	N12:17.41	W142:39.69	3	125	76	On
002 101		196	10 Sep 03	1253	N10:40.23	W140:11.59	5	7	257	On
002 011		200	11 Sep 03	0606	N09:36.85	W138:23.29	2	1	227	On
002 101		213	11 Sep 03	1423	N09:19.52	W137:49.20	1	228	268	On
002 011		216	11 Sep 03	1526	N09:14.34	W137:44.03	3	230	117	On
002		235	14 Sep 03	1455	N03:16.91	W128:33.64	5	7	200	On
002		247	18 Sep 03	0824	N02:04.41	W118:38.59	4	7	158	On
002 003		253	20 Sep 03	1212	N03:08.88	W114:38.65	3	208	123	On
002 011		254	20 Sep 03	1318	N03:10.80	W114:30.03	4	1	568	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
002	011	258	20 Sep 03	1609	N03:06.49	W114:11.71	4	7	148	On
002	011	272	23 Sep 03	1656	N04:11.20	W103:16.34	5	125	330	On
002		277	24 Sep 03	1458	N04:35.86	W099:41.56	5	208	99	Off
002	003	278	24 Sep 03	1626	N04:43.30	W099:33.90	5	7	69	On
002		293	26 Sep 03	1332	N05:13.25	W094:26.46	4	1	28	On
002		296	26 Sep 03	1737	N05:33.30	W093:54.04	4	230	11	On
002	011	298	27 Sep 03	0719	N06:21.32	W092:06.39	4	7	146	On
002		299	27 Sep 03	0832	N06:25.59	W092:03.79	4	125	42	On
002		300	27 Sep 03	1119	N06:36.25	W091:41.61	4	208	63	On
002	010	301	27 Sep 03	1355	N06:44.31	W091:16.27	4	125	301	On
002	010	303	27 Sep 03	1511	N06:45.28	W091:11.93	4	7	202	On
002		306	28 Sep 03	0724	N07:45.34	W089:33.68	5	125	36	On
002		332	8 Oct 03	1035	N05:54.97	W084:45.42	4	233	68	On
002	010	333	8 Oct 03	1537	N05:09.22	W084:44.78	5	126	132	On
002		346	10 Oct 03	0852	N02:05.22	W088:31.34	5	233	91	On
002		355	10 Oct 03	1833	N01:27.60	W089:26.36	5	233	169	On
002	101	390	14 Oct 03	1232	S05:05.02	W097:58.41	4	73	422	On
002	010	521	12 Nov 03	0929	N05:32.73	W083:00.33	4	233	248	On
002	177	710	26 Nov 03	0629	N08:27.45	W095:01.92	2	199	183	On
002	011	713	26 Nov 03	0832	N08:26.10	W095:14.81	3	233	307	On
002	011	714	26 Nov 03	1023	N08:20.00	W095:26.37	3	199	107	On
002	011	720	26 Nov 03	1359	N08:10.35	W095:54.59	2	126	160	On
002		723	26 Nov 03	1604	N08:07.64	W096:02.81	2	233	48	On
002		739	28 Nov 03	0944	N09:41.43	W101:11.65	4	199	148	On
002	010	740	28 Nov 03	1109	N09:36.44	W101:27.54	4	73	257	On
002	010	741	28 Nov 03	1229	N09:30.20	W101:40.49	4	224	205	On
002	010	742	28 Nov 03	1405	N09:25.95	W101:55.22	4	233	187	On
002		743	28 Nov 03	1454	N09:24.41	W102:03.34	4	199	135	On
002	017	744	29 Nov 03	0730	N10:36.85	W104:10.02	5	73	18	On
002	010	747	29 Nov 03	1029	N11:07.77	W104:31.67	5	73	400	On
002		753	30 Nov 03	0830	N13:23.85	W107:01.27	5	126	59	On
002		755	30 Nov 03	1750	N14:12.50	W108:16.16	3	233	303	On
002		756	30 Nov 03	1813	N14:11.87	W108:19.37	3	233	210	Off
002		758	1 Dec 03	1110	N14:37.16	W109:48.18	4	224	63	On
002		761	1 Dec 03	1429	N14:29.35	W110:15.93	4	200	11	On
002	010	762	1 Dec 03	1643	N14:22.24	W110:35.62	4	224	220	On
002		768	2 Dec 03	1210	N15:28.63	W112:32.92	4	233	73	On
002	010	769	2 Dec 03	1246	N15:30.22	W112:39.42	4	73	130	On
002		772	3 Dec 03	0821	N16:36.61	W114:23.87	4	126	133	On
002	011	774	3 Dec 03	1224	N16:49.51	W114:55.80	4	233	185	On
002		777	4 Dec 03	1218	N18:42.75	W118:05.40	4	199	24	On
002	010	1106	9 Aug 03	1615	N21:54.32	W109:49.30	1	126	106	On
002		1114	10 Aug 03	0851	N23:18.72	W108:50.64	4	200	141	On
002	010	1119	10 Aug 03	1304	N23:45.68	W109:05.30	3	233	187	On
002		1158	12 Aug 03	1516	N25:30.92	W109:25.72	4	224	211	On
002	018	1164	13 Aug 03	0854	N24:15.01	W108:03.15	2	199	145	On
002		1165	13 Aug 03	0944	N24:10.67	W108:01.02	1	126	52	On
002		1166	13 Aug 03	1021	N24:08.75	W107:55.78	1	73	175	On
002		1168	13 Aug 03	1223	N23:57.97	W107:46.01	0	126	113	On
002		1173	14 Aug 03	0824	N22:04.05	W106:19.16	1	199	37	On
002		1174	14 Aug 03	1011	N21:51.70	W106:13.54	2	233	6	On
002		1175	14 Aug 03	1030	N21:49.40	W106:13.14	2	233	13	On
002		1182	15 Aug 03	0649	N21:52.26	W107:38.16	3	200	8	Off
002	018	1187	15 Aug 03	1021	N21:42.28	W107:57.14	2	73	179	On
002	010	1188	15 Aug 03	1256	N21:26.89	W108:05.03	3	73	165	On
002	010	1189	15 Aug 03	1428	N21:15.55	W108:05.94	2	199	355	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft No.	Obs No.	School Size	Ef- fort
002	010	1190	15 Aug 03	1527	N21:11.50	W108:10.86	2	126	264	On
002	010	1198	16 Aug 03	0959	N20:06.24	W106:19.97	3	73	237	On
002		1199	16 Aug 03	1142	N20:07.00	W106:10.44	3	126	78	On
002	010	1200	16 Aug 03	1226	N20:07.73	W106:08.93	3	73	98	On
002	010 015	1222	21 Aug 03	1316	N17:34.81	W105:34.81	1	126	146	On
002	010	1226	21 Aug 03	1626	N17:32.06	W105:57.41	0	73	417	On
002		1232	22 Aug 03	0730	N17:05.30	W107:25.68	3	73	55	On
002	010	1238	22 Aug 03	1519	N16:47.20	W108:21.99	2	200	490	On
002	010	1246	23 Aug 03	1236	N16:03.26	W110:58.32	3	126	36	On
002	010	1268	28 Aug 03	0932	N10:51.23	W124:03.04	4	126	345	On
002	010	1269	28 Aug 03	1027	N10:47.10	W124:04.98	4	199	83	On
002	010	1278	30 Aug 03	0955	N11:16.88	W119:47.99	3	126	166	On
002	010	1279	30 Aug 03	1159	N11:20.33	W119:35.96	3	73	475	On
002		1291	31 Aug 03	1227	N12:16.06	W117:07.15	4	233	38	On
002	010	1294	1 Sep 03	1434	N13:25.61	W113:35.13	4	200	470	On
002	010	1299	5 Sep 03	1052	N17:13.14	W102:59.59	4	73	243	On
002	010	1300	5 Sep 03	1245	N17:16.05	W102:45.76	4	233	112	On
002		1301	5 Sep 03	1446	N17:27.94	W102:37.28	3	73	6	On
002	010	1322	19 Sep 03	0757	N14:52.56	W098:56.92	4	73	158	On
002	010	1324	19 Sep 03	0904	N14:48.22	W099:06.22	4	199	357	On
002	010 096	1326	20 Sep 03	0732	N13:23.10	W101:25.95	2	73	133	On
002	010	1329	20 Sep 03	1728	N12:55.84	W101:17.75	2	126	225	On
002	010	1335	22 Sep 03	1337	N13:27.97	W096:09.07	4	73	635	On
002	010	1339	22 Sep 03	1835	N13:28.98	W095:28.88	3	200	213	On
002	010	1342	23 Sep 03	0848	N13:32.48	W093:54.05	2	233	57	On
002		1439	9 Oct 03	1512	N05:58.61	W088:17.71	4	1	44	On
002	077	1442	10 Oct 03	1302	N06:05.14	W090:27.68	5	228	32	On
002	101	1443	10 Oct 03	1644	N06:06.43	W090:49.44	4	228	56	On
002	010	1452	12 Oct 03	0703	N06:21.98	W094:41.43	4	208	170	On
002	011	1453	12 Oct 03	0757	N06:19.05	W094:49.65	4	1	158	On
002	010	1456	12 Oct 03	1241	N06:24.68	W095:12.51	3	1	67	On
002	011	1463	15 Oct 03	1117	N06:08.58	W102:55.51	4	208	65	On
002	010	1473	19 Oct 03	0741	N11:03.20	W103:37.93	3	228	192	On
002		1474	19 Oct 03	0924	N11:13.41	W103:29.08	3	125	78	On
002	010	1477	19 Oct 03	1204	N11:22.06	W103:11.31	2	125	263	On
002		1483	21 Oct 03	0734	N11:53.00	W098:44.12	3	230	102	On
002		1484	21 Oct 03	0821	N11:52.56	W098:38.30	3	7	100	On
002	010	1489	21 Oct 03	1407	N11:40.65	W098:03.90	4	1	187	On
002	010	1491	22 Oct 03	0933	N11:32.08	W096:09.07	5	208	277	On
002	010	1492	22 Oct 03	1637	N11:54.53	W095:21.70	5	208	141	On
002	010	1494	23 Oct 03	0740	N12:31.67	W093:46.66	4	7	457	On
002	010	1552	31 Oct 03	0626	N14:45.71	W097:00.78	2	125	212	On
002	010	1557	31 Oct 03	0918	N14:29.99	W097:17.41	2	208	194	On
002	010	1571	1 Nov 03	1633	N15:09.97	W101:06.33	1	228	292	On
002		1572	1 Nov 03	1722	N15:09.58	W101:08.20	1	208	12	On
002		1580	2 Nov 03	1820	N13:23.03	W104:16.05	2	1	68	On
002	010	1581	3 Nov 03	0748	N12:27.05	W105:52.97	4	7	138	On
002	010	1582	3 Nov 03	0848	N12:25.02	W106:01.78	4	208	38	On
002	010	1583	3 Nov 03	1034	N12:18.31	W106:14.81	4	7	160	On
002	010	1584	3 Nov 03	1525	N11:54.71	W106:53.47	4	7	95	On
002	010	1586	4 Nov 03	0833	N10:39.92	W108:47.34	5	228	515	On
002	010	1588	4 Nov 03	0918	N10:36.53	W108:49.87	5	208	238	On
002	010	1590	5 Nov 03	1456	N08:59.87	W111:18.48	4	208	168	On
002		1594	6 Nov 03	1422	N07:20.39	W113:40.51	4	7	59	On
002		1597	7 Nov 03	0754	N06:03.51	W115:37.07	3	125	147	On
002		1608	10 Nov 03	0718	N08:37.38	W118:43.06	2	208	52	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
002	101	1609	10 Nov 03	0811	N08:41.87	W118:34.98	3	208	210	On
002	010	1615	11 Nov 03	1656	N10:38.23	W114:34.75	5	125	113	On
002	010	1616	12 Nov 03	0650	N11:20.77	W112:53.24	4	208	129	On
002	010	1620	12 Nov 03	1117	N11:34.71	W112:25.45	4	208	410	On
002	010	1622	13 Nov 03	0805	N12:42.45	W110:10.22	4	125	215	On
002	010	1624	13 Nov 03	1107	N12:52.70	W109:52.91	5	208	133	On
002	010	1625	13 Nov 03	1409	N13:06.29	W109:30.55	5	1	287	On
002		1629	14 Nov 03	0758	N14:01.18	W107:24.42	2	7	54	On
002	010	1631	14 Nov 03	1116	N14:13.11	W106:54.59	3	1	57	On
002		1634	14 Nov 03	1705	N14:34.93	W106:11.24	3	7	39	On
002		1636	15 Nov 03	0759	N15:20.51	W104:35.96	4	230	94	On
002		1639	15 Nov 03	1504	N15:48.82	W103:38.61	1	7	55	On
002		1648	16 Nov 03	1315	N17:00.60	W101:01.43	1	230	147	On
002		1649	16 Nov 03	1441	N17:01.67	W100:59.11	2	228	10	On
002		1653	17 Nov 03	0854	N17:40.25	W102:09.78	2	230	73	On
002		1654	17 Nov 03	0919	N17:40.84	W102:13.17	2	7	35	On
002		1677	23 Nov 03	0740	N18:39.49	W107:11.13	3	1	20	On
002		1682	23 Nov 03	1159	N18:34.27	W107:42.35	4	1	38	On
002	018	1690	24 Nov 03	1205	N17:51.81	W110:42.44	4	230	41	On
002	010	1691	24 Nov 03	1617	N17:42.92	W111:22.58	4	230	115	On
002	010	1695	25 Nov 03	1140	N17:06.48	W114:03.23	4	208	88	On
002		1706	29 Nov 03	1353	N18:23.58	W119:21.30	4	7	106	On
002		1710	30 Nov 03	1614	N19:04.03	W115:46.71	4	230	109	On
<i>Stenella longirostris</i> (unid. subsp.)										
003	077	158	20 Aug 03	1833	N08:18.55	W146:06.18	1	1	93	On
003		159	20 Aug 03	1833	N08:19.81	W146:05.86	1	228	1	On
003	002	179	26 Aug 03	1547	N20:32.73	W157:05.44	4	125	80	On
003	002	185	5 Sep 03	1040	N19:06.67	W156:15.56	4	228	86	On
003	002	253	20 Sep 03	1212	N03:08.88	W114:38.65	3	208	123	On
003	002	278	24 Sep 03	1626	N04:43.30	W099:33.90	5	7	69	On
003		544	14 Nov 03	0840	N07:24.60	W078:12.35	2	233	124	Off
003		546	14 Nov 03	1055	N07:22.99	W078:19.34	2	126	20	Off
003	090	1215	21 Aug 03	0955	N17:39.32	W105:13.37	1	224	201	On
003		1263	26 Aug 03	1522	N13:27.22	W120:24.62	4	224	36	On
003		1363	24 Sep 03	1615	N13:04.01	W090:27.55	4	73	4500	Off
003		1364	24 Sep 03	1714	N13:10.93	W090:23.41	4	233	500	Off
<i>Delphinus</i> sp.										
005		506	8 Nov 03	0637	N00:00.08	W080:44.62	4	126	25	Off
005		1001	31 Jul 03	1545	N32:22.02	W117:09.30	2	73	16	On
005		1002	31 Jul 03	1610	N32:18.35	W117:06.39	2	126	36	On
005		1097	9 Aug 03	1244	N21:44.30	W110:06.01	1	99	48	Off
<i>Stenella attenuata graffmani</i>										
006		508	8 Nov 03	0832	N00:03.00	W080:31.06	4	73	120	On
006		511	8 Nov 03	1637	N00:42.53	W080:13.30	4	73	90	On
006		513	9 Nov 03	0727	N00:58.67	W080:06.81	4	73	24	On
006		515	9 Nov 03	0905	N00:58.18	W080:01.07	5	73	61	On
006	017	517	9 Nov 03	1345	N01:05.27	W079:42.25	5	126	255	On
006		545	14 Nov 03	1006	N07:23.79	W078:18.71	2	73	95	Off
006		548	14 Nov 03	1203	N07:34.12	W078:28.98	3	126	118	On
006		549	14 Nov 03	1333	N07:39.39	W078:34.20	3	233	12	On
006		550	14 Nov 03	1404	N07:43.78	W078:36.77	3	73	17	On
006		554	14 Nov 03	1642	N07:54.88	W078:50.66	3	98	6	Off
006		555	14 Nov 03	1700	N07:57.63	W078:52.78	2	199	14	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft No.	Obs No.	School Size	Ef- fort
006		556	14 Nov 03	1724	N08:00.03	W078:54.87	2	233	47	On
006		557	19 Nov 03	1138	N08:43.71	W079:27.14	1	233	16	On
006		559	19 Nov 03	1226	N08:38.56	W079:28.75	0	73	35	On
006		567	20 Nov 03	0633	N07:08.97	W080:56.84	2	99	5	Off
006		568	20 Nov 03	0646	N07:11.76	W081:01.36	2	126	14	On
006		569	20 Nov 03	0706	N07:13.17	W081:02.19	2	126	2	On
006		570	20 Nov 03	0707	N07:12.39	W081:01.22	2	84	8	Off
006		572	20 Nov 03	0711	N07:13.77	W081:02.28	2	126	2	On
006		574	20 Nov 03	0717	N07:14.93	W081:03.60	2	126	1	On
006		575	20 Nov 03	0719	N07:13.71	W081:02.89	2	126	10	On
006		576	20 Nov 03	0722	N07:14.06	W081:03.73	2	126	6	On
006		577	20 Nov 03	0750	N07:16.08	W081:07.43	3	233	10	On
006		579	20 Nov 03	0830	N07:20.07	W081:13.47	2	233	9	On
006		581	20 Nov 03	0932	N07:18.43	W081:22.00	2	224	4	On
006		587	20 Nov 03	1157	N07:05.43	W081:41.02	4	199	323	On
006		588	20 Nov 03	1507	N07:19.73	W082:00.20	4	233	49	On
006		593	20 Nov 03	1757	N07:31.33	W082:07.25	3	126	20	On
006		597	21 Nov 03	0830	N08:23.95	W083:36.85	2	233	59	On
006		598	21 Nov 03	0915	N08:27.58	W083:41.68	2	73	82	On
006		599	21 Nov 03	0950	N08:28.51	W083:43.59	2	200	10	On
006		601	21 Nov 03	1014	N08:31.41	W083:50.11	2	224	164	On
006		602	21 Nov 03	1234	N08:39.76	W083:58.54	2	233	158	On
006		604	21 Nov 03	1451	N08:56.04	W084:06.32	3	233	70	On
006		605	21 Nov 03	1550	N08:57.57	W084:08.24	3	73	65	On
006		1167	13 Aug 03	1123	N24:06.05	W107:53.42	1	224	52	On
006		1207	16 Aug 03	1821	N19:41.29	W105:22.68	4	200	620	On
006		1211	20 Aug 03	1740	N18:12.69	W103:33.13	3	126	21	On
006		1302	6 Sep 03	0810	N17:20.04	W101:14.36	2	233	10	On
006		1303	6 Sep 03	0939	N17:16.66	W101:08.77	2	200	11	On
006		1306	6 Sep 03	1153	N17:09.19	W100:58.25	2	224	74	On
006		1308	6 Sep 03	1245	N17:09.14	W100:54.46	1	73	28	On
006		1314	17 Sep 03	1646	N16:39.61	W099:45.64	4	200	45	On
006		1315	17 Sep 03	1747	N16:36.92	W099:39.42	3	199	27	On
006		1316	17 Sep 03	1818	N16:35.17	W099:34.37	3	126	107	On
006		1317	18 Sep 03	0634	N16:03.01	W098:22.71	3	126	171	On
006		1320	18 Sep 03	0848	N16:04.22	W098:07.95	3	126	29	On
006		1349	24 Sep 03	0820	N13:44.51	W090:54.73	4	73	10	On
006		1351	24 Sep 03	0836	N13:44.66	W090:52.50	4	200	29	On
006		1396	27 Sep 03	1051	N12:36.88	W088:41.74	2	73	250	On
006	018	1400	27 Sep 03	1245	N12:40.16	W088:33.88	2	126	144	On
006		1407	27 Sep 03	1556	N12:38.16	W088:18.99	1	200	308	On
006		1408	27 Sep 03	1658	N12:41.99	W088:12.68	2	233	24	On
006		1412	28 Sep 03	1111	N11:46.97	W087:16.42	3	200	13	On
006		1418	28 Sep 03	1642	N11:33.32	W086:38.22	2	227	3	Off
006		1419	28 Sep 03	1747	N11:30.72	W086:28.06	2	73	8	On
006		1420	28 Sep 03	1806	N11:29.20	W086:25.14	3	73	11	On
006		1422	29 Sep 03	0635	N10:38.30	W085:53.86	3	126	3	Off
006		1423	29 Sep 03	0641	N10:37.25	W085:53.94	3	199	15	On
006		1424	29 Sep 03	0708	N10:32.70	W085:54.56	3	126	28	On
006		1425	29 Sep 03	0733	N10:28.40	W085:55.40	3	224	48	On
006		1426	29 Sep 03	0808	N10:22.13	W085:57.36	2	224	50	On
006	018	1427	29 Sep 03	0847	N10:17.14	W085:58.79	2	233	30	On
006		1428	29 Sep 03	0927	N10:12.84	W085:57.03	2	200	30	On
006		1429	29 Sep 03	0956	N10:08.21	W085:56.00	2	200	20	On
006		1430	29 Sep 03	1019	N10:03.97	W085:53.06	2	126	13	On
006		1431	29 Sep 03	1130	N09:54.60	W085:54.84	2	126	80	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
006		1435	29 Sep 03	1617	N09:40.23	W085:19.24	4	224	63	On
006		1436	29 Sep 03	1711	N09:40.45	W085:15.80	4	73	10	On
006		1503	28 Oct 03	0848	N13:49.81	W090:52.99	1	1	17	On
006 018		1504	28 Oct 03	0912	N13:48.53	W090:56.27	1	230	53	On
006		1506	28 Oct 03	1137	N13:46.86	W091:19.39	1	1	8	On
006		1509	28 Oct 03	1256	N13:48.16	W091:29.97	1	125	42	On
006		1510	28 Oct 03	1341	N13:50.74	W091:34.78	1	125	14	On
006		1511	28 Oct 03	1409	N13:50.91	W091:37.92	2	7	5	On
006		1513	28 Oct 03	1524	N13:49.40	W091:50.56	1	1	37	On
006		1515	28 Oct 03	1552	N13:51.27	W091:54.37	2	228	13	On
006		1518	28 Oct 03	1618	N13:50.80	W091:55.61	2	125	14	On
006		1520	28 Oct 03	1652	N13:52.41	W091:57.70	2	1	8	On
006		1523	29 Oct 03	0644	N15:03.07	W092:55.55	2	228	16	On
006		1524	29 Oct 03	0749	N15:04.89	W093:06.65	1	208	33	On
006		1525	29 Oct 03	0828	N15:05.53	W093:11.62	1	1	47	On
006		1526	29 Oct 03	0841	N15:05.51	W093:15.20	1	1	15	On
006		1528	29 Oct 03	0908	N15:04.98	W093:16.82	1	125	13	On
006 090		1531	29 Oct 03	1226	N15:06.96	W093:43.12	3	230	81	On
006		1537	30 Oct 03	0623	N16:06.26	W094:37.62	1	228	38	On
006		1539	30 Oct 03	0646	N16:03.75	W094:38.37	1	125	20	On
006		1540	30 Oct 03	0646	N16:04.77	W094:39.38	1	208	20	On
006		1541	30 Oct 03	0708	N16:02.65	W094:40.99	1	125	7	On
006		1542	30 Oct 03	1045	N15:48.25	W095:12.11	1	1	2	On
006		1652	17 Nov 03	0754	N17:38.32	W102:04.01	2	125	160	On
006		1658	17 Nov 03	1216	N17:49.93	W102:31.08	4	1	210	On
<i>Stenella longirostris orientalis</i>										
010 002		69	11 Aug 03	1617	N10:50.77	W131:29.62	5	228	66	On
010 002		301	27 Sep 03	1355	N06:44.31	W091:16.27	4	125	301	On
010 002		303	27 Sep 03	1511	N06:45.28	W091:11.93	4	7	202	On
010 002		333	8 Oct 03	1537	N05:09.22	W084:44.78	5	126	132	On
010 002 011		521	12 Nov 03	0929	N05:32.73	W083:00.33	4	233	248	On
010		699	25 Nov 03	1333	N09:06.53	W093:08.12	2	73	30	Off
010		700	25 Nov 03	1409	N09:04.62	W093:11.14	2	200	58	On
010 002		740	28 Nov 03	1109	N09:36.44	W101:27.54	4	73	257	On
010 002		741	28 Nov 03	1229	N09:30.20	W101:40.49	4	224	205	On
010 002		742	28 Nov 03	1405	N09:25.95	W101:55.22	4	233	187	On
010 177		745	29 Nov 03	0949	N11:01.91	W104:25.80	4	126	60	On
010 002		747	29 Nov 03	1029	N11:07.77	W104:31.67	5	73	400	On
010		757	1 Dec 03	0833	N14:47.16	W109:27.33	4	224	15	On
010		759	1 Dec 03	1148	N14:36.98	W109:50.07	4	200	203	On
010 002		762	1 Dec 03	1643	N14:22.24	W110:35.62	4	224	220	On
010 177		763	1 Dec 03	1740	N14:19.16	W110:37.50	4	73	40	On
010		764	1 Dec 03	1813	N14:17.90	W110:40.76	4	233	20	On
010 002		769	2 Dec 03	1246	N15:30.22	W112:39.42	4	73	130	On
010 002		1106	9 Aug 03	1615	N21:54.32	W109:49.30	1	126	106	On
010 002		1119	10 Aug 03	1304	N23:45.68	W109:05.30	3	233	187	On
010 002		1188	15 Aug 03	1256	N21:26.89	W108:05.03	3	73	165	On
010 002		1189	15 Aug 03	1428	N21:15.55	W108:05.94	2	199	355	On
010 002		1190	15 Aug 03	1527	N21:11.50	W108:10.86	2	126	264	On
010		1196	16 Aug 03	0810	N20:15.30	W106:29.21	3	73	77	On
010 002		1198	16 Aug 03	0959	N20:06.24	W106:19.97	3	73	237	On
010 002		1200	16 Aug 03	1226	N20:07.73	W106:08.93	3	73	98	On
010 002 015		1222	21 Aug 03	1316	N17:34.81	W105:34.81	1	126	146	On
010 002		1226	21 Aug 03	1626	N17:32.06	W105:57.41	0	73	417	On
010 002		1238	22 Aug 03	1519	N16:47.20	W108:21.99	2	200	490	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
010		1243	23 Aug 03	0928	N16:12.33	W110:36.07	2	126	62	On
010 002		1246	23 Aug 03	1236	N16:03.26	W110:58.32	3	126	36	On
010 002		1268	28 Aug 03	0932	N10:51.23	W124:03.04	4	126	345	On
010 002		1269	28 Aug 03	1027	N10:47.10	W124:04.98	4	199	83	On
010 002		1278	30 Aug 03	0955	N11:16.88	W119:47.99	3	126	166	On
010 002		1279	30 Aug 03	1159	N11:20.33	W119:35.96	3	73	475	On
010		1284	30 Aug 03	1811	N11:37.71	W118:59.30	2	73	42	On
010		1287	30 Aug 03	1940	N11:35.49	W118:51.12	2	199	102	On
010		1292	31 Aug 03	1437	N12:18.57	W116:50.56	4	73	643	On
010 002		1294	1 Sep 03	1434	N13:25.61	W113:35.13	4	200	470	On
010 002		1299	5 Sep 03	1052	N17:13.14	W102:59.59	4	73	243	On
010 002		1300	5 Sep 03	1245	N17:16.05	W102:45.76	4	233	112	On
010 002		1322	19 Sep 03	0757	N14:52.56	W098:56.92	4	73	158	On
010 002		1324	19 Sep 03	0904	N14:48.22	W099:06.22	4	199	357	On
010 002 096		1326	20 Sep 03	0732	N13:23.10	W101:25.95	2	73	133	On
010 002		1329	20 Sep 03	1728	N12:55.84	W101:17.75	2	126	225	On
010 002		1335	22 Sep 03	1337	N13:27.97	W096:09.07	4	73	635	On
010 002		1339	22 Sep 03	1835	N13:28.98	W095:28.88	3	200	213	On
010 002		1342	23 Sep 03	0848	N13:32.48	W093:54.05	2	233	57	On
010 002		1452	12 Oct 03	0703	N06:21.98	W094:41.43	4	208	170	On
010 002		1456	12 Oct 03	1241	N06:24.68	W095:12.51	3	1	67	On
010 002		1473	19 Oct 03	0741	N11:03.20	W103:37.93	3	228	192	On
010 002		1477	19 Oct 03	1204	N11:22.06	W103:11.31	2	125	263	On
010		1485	21 Oct 03	0906	N11:49.14	W098:35.04	4	230	82	On
010 090		1487	21 Oct 03	1045	N11:43.58	W098:23.18	4	1	35	Off
010 002		1489	21 Oct 03	1407	N11:40.65	W098:03.90	4	1	187	On
010 002		1491	22 Oct 03	0933	N11:32.08	W096:09.07	5	208	277	On
010 002		1492	22 Oct 03	1637	N11:54.53	W095:21.70	5	208	141	On
010 002		1494	23 Oct 03	0740	N12:31.67	W093:46.66	4	7	457	On
010 002		1552	31 Oct 03	0626	N14:45.71	W097:00.78	2	125	212	On
010		1553	31 Oct 03	0729	N14:42.13	W097:05.24	2	7	11	On
010 002		1557	31 Oct 03	0918	N14:29.99	W097:17.41	2	208	194	On
010 002		1571	1 Nov 03	1633	N15:09.97	W101:06.33	1	228	292	On
010 002		1581	3 Nov 03	0748	N12:27.05	W105:52.97	4	7	138	On
010 002		1582	3 Nov 03	0848	N12:25.02	W106:01.78	4	208	38	On
010 002		1583	3 Nov 03	1034	N12:18.31	W106:14.81	4	7	160	On
010 002		1584	3 Nov 03	1525	N11:54.71	W106:53.47	4	7	95	On
010		1585	4 Nov 03	0726	N10:43.63	W108:36.66	4	208	70	On
010 002		1586	4 Nov 03	0833	N10:39.92	W108:47.34	5	228	515	On
010 002		1588	4 Nov 03	0918	N10:36.53	W108:49.87	5	208	238	On
010 002		1590	5 Nov 03	1456	N08:59.87	W111:18.48	4	208	168	On
010 002		1615	11 Nov 03	1656	N10:38.23	W114:34.75	5	125	113	On
010 002		1616	12 Nov 03	0650	N11:20.77	W112:53.24	4	208	129	On
010 002		1620	12 Nov 03	1117	N11:34.71	W112:25.45	4	208	410	On
010 002		1622	13 Nov 03	0805	N12:42.45	W110:10.22	4	125	215	On
010		1623	13 Nov 03	1028	N12:52.44	W109:57.07	5	1	126	On
010 002		1624	13 Nov 03	1107	N12:52.70	W109:52.91	5	208	133	On
010 002		1625	13 Nov 03	1409	N13:06.29	W109:30.55	5	1	287	On
010 002		1631	14 Nov 03	1116	N14:13.11	W106:54.59	3	1	57	On
010 002		1691	24 Nov 03	1617	N17:42.92	W111:22.58	4	230	115	On
010 002		1695	25 Nov 03	1140	N17:06.48	W114:03.23	4	208	88	On
<i>Stenella longirostris</i> (whitebelly)										
011		41	6 Aug 03	1037	N15:02.74	W127:18.92	5	231	22	Off
011		75	12 Aug 03	1716	N13:08.13	W133:39.75	3	125	142	On
011 002		77	12 Aug 03	1813	N13:13.93	W133:44.67	2	125	220	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
011	002	79	13 Aug 03	0826	N14:16.35	W134:55.49	3	208	343	On
011	002	83	13 Aug 03	1622	N14:59.02	W135:49.31	3	125	233	On
011		86	14 Aug 03	0659	N13:18.58	W136:16.87	2	1	10	On
011	002	89	14 Aug 03	1011	N12:49.30	W136:19.25	1	208	316	On
011	013 002 077	91	14 Aug 03	1128	N12:40.65	W136:23.62	2	208	304	On
011	002 072	98	14 Aug 03	1846	N11:52.75	W136:28.68	4	1	525	On
011		99	15 Aug 03	0741	N10:37.87	W136:48.28	2	1	15	On
011	002	101	15 Aug 03	0832	N10:32.74	W136:52.62	2	125	135	On
011	002	103	15 Aug 03	0953	N10:20.20	W136:53.28	2	208	48	Off
011		110	15 Aug 03	1612	N09:43.60	W136:58.17	2	7	65	On
011	002 077	120	18 Aug 03	0649	N06:34.55	W140:07.65	4	7	117	On
011	002	123	18 Aug 03	1116	N07:06.40	W140:32.42	4	7	78	On
011	002	124	18 Aug 03	1236	N07:16.84	W140:37.44	4	208	83	On
011	002	125	18 Aug 03	1429	N07:28.17	W140:49.40	4	228	162	On
011	002	127	18 Aug 03	1626	N07:31.43	W141:01.12	3	125	197	On
011	002	130	19 Aug 03	0757	N08:48.88	W142:12.56	3	208	82	On
011	077	137	19 Aug 03	1449	N09:22.57	W142:57.97	2	1	35	On
011		141	20 Aug 03	0750	N09:04.94	W144:53.20	0	230	193	On
011		143	20 Aug 03	0855	N09:01.25	W144:59.44	1	230	136	On
011	002	145	20 Aug 03	1033	N08:51.39	W145:05.90	2	1	157	On
011	002	146	20 Aug 03	1119	N08:49.85	W145:12.90	1	208	260	On
011		150	20 Aug 03	1227	N08:50.73	W145:19.24	1	125	17	On
011		151	20 Aug 03	1310	N08:49.93	W145:25.32	1	230	9	On
011	002	200	11 Sep 03	0606	N09:36.85	W138:23.29	2	1	227	On
011	002	216	11 Sep 03	1526	N09:14.34	W137:44.03	3	230	117	On
011	002	254	20 Sep 03	1318	N03:10.80	W114:30.03	4	1	568	On
011	002	258	20 Sep 03	1609	N03:06.49	W114:11.71	4	7	148	On
011	002	272	23 Sep 03	1656	N04:11.20	W103:16.34	5	125	330	On
011	002	298	27 Sep 03	0719	N06:21.32	W092:06.39	4	7	146	On
011	002 010	521	12 Nov 03	0929	N05:32.73	W083:00.33	4	233	248	On
011	002	713	26 Nov 03	0832	N08:26.10	W095:14.81	3	233	307	On
011	002	714	26 Nov 03	1023	N08:20.00	W095:26.37	3	199	107	On
011	002	720	26 Nov 03	1359	N08:10.35	W095:54.59	2	126	160	On
011	002	774	3 Dec 03	1224	N16:49.51	W114:55.80	4	233	185	On
011	002	1453	12 Oct 03	0757	N06:19.05	W094:49.65	4	1	158	On
011	002	1463	15 Oct 03	1117	N06:08.58	W102:55.51	4	208	65	On
<i>Stenella coeruleoalba</i>										
013		17	30 Jul 03	1926	N29:43.77	W118:44.56	3	228	175	On
013		18	31 Jul 03	0651	N28:53.02	W119:58.60	1	208	38	On
013		20	31 Jul 03	0854	N28:40.28	W120:13.63	1	125	53	On
013		21	31 Jul 03	1047	N28:26.30	W120:26.68	1	228	86	On
013		22	31 Jul 03	1152	N28:21.29	W120:34.14	1	1	19	On
013		23	31 Jul 03	1321	N28:11.13	W120:47.43	1	125	63	On
013		24	31 Jul 03	1511	N27:57.77	W121:02.07	1	228	61	On
013		27	1 Aug 03	0740	N26:31.56	W122:57.23	2	228	22	On
013		34	4 Aug 03	1827	N19:12.80	W125:59.30	5	7	37	On
013		40	5 Aug 03	1650	N17:18.71	W127:28.59	4	1	9	Off
013		42	6 Aug 03	1329	N14:36.94	W127:20.22	5	7	31	On
013		50	8 Aug 03	1746	N07:40.14	W126:49.05	4	1	63	On
013		51	8 Aug 03	1811	N07:37.25	W126:51.00	4	1	57	On
013	002	52	8 Aug 03	1838	N07:35.36	W126:51.77	4	230	49	On
013		56	9 Aug 03	0902	N06:33.15	W127:01.29	4	208	21	Off
013		57	9 Aug 03	1216	N06:53.18	W127:25.66	4	125	33	On
013		62	10 Aug 03	1244	N08:25.34	W128:55.43	4	228	15	On
013		71	12 Aug 03	1253	N12:46.55	W133:29.63	4	208	35	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft No.	Obs No.	School Size	Ef- fort
013		78	13 Aug 03	0651	N14:07.47	W134:45.46	2	208	53	On
013		80	13 Aug 03	1118	N14:32.47	W135:10.21	3	7	43	On
013		82	13 Aug 03	1450	N14:52.32	W135:39.00	3	208	35	On
013	002	88	14 Aug 03	0917	N12:55.57	W136:18.29	1	7	55	On
013	011 002 077	91	14 Aug 03	1128	N12:40.65	W136:23.62	2	208	304	On
013		92	14 Aug 03	1300	N12:36.15	W136:25.49	2	125	34	On
013		97	14 Aug 03	1725	N12:05.20	W136:34.11	4	7	27	On
013		111	15 Aug 03	1753	N09:25.33	W137:00.56	3	208	25	On
013		129	19 Aug 03	0659	N08:43.73	W142:12.56	4	228	49	On
013		131	19 Aug 03	0833	N08:52.54	W142:13.62	3	1	49	On
013		132	19 Aug 03	1003	N08:59.69	W142:20.68	4	7	41	On
013		144	20 Aug 03	0931	N08:56.09	W145:03.84	1	208	130	On
013		156	20 Aug 03	1731	N08:24.97	W146:01.36	1	208	32	On
013		187	9 Sep 03	0853	N12:33.41	W143:10.98	4	1	27	On
013		199	10 Sep 03	1524	N10:31.12	W139:55.09	4	228	63	On
013		201	11 Sep 03	0713	N09:30.88	W138:22.71	2	208	55	On
013		206	11 Sep 03	1038	N09:27.16	W138:12.74	2	1	58	On
013		210	11 Sep 03	1357	N09:21.31	W137:51.97	1	208	38	Off
013		212	11 Sep 03	1422	N09:22.03	W137:49.35	1	1	38	On
013		219	12 Sep 03	1054	N07:33.09	W135:13.69	5	125	58	On
013		221	12 Sep 03	1809	N06:56.11	W134:12.02	4	1	51	On
013		271	22 Sep 03	1730	N03:49.90	W106:42.36	4	230	97	On
013		274	24 Sep 03	0705	N04:25.76	W100:56.59	4	1	22	On
013		276	24 Sep 03	1252	N04:35.65	W100:01.86	5	228	11	On
013		279	24 Sep 03	1727	N04:44.09	W099:29.77	4	208	36	On
013		280	25 Sep 03	0632	N04:39.37	W097:50.54	4	1	46	On
013		289	25 Sep 03	1556	N04:50.16	W096:29.82	4	228	43	On
013		290	25 Sep 03	1713	N04:55.09	W096:16.75	4	1	41	On
013		297	27 Sep 03	0714	N06:21.88	W092:08.07	4	208	17	On
013		308	28 Sep 03	0900	N07:57.08	W089:28.59	5	7	77	On
013		310	28 Sep 03	1010	N08:08.50	W089:27.18	5	7	39	Off
013		312	28 Sep 03	1040	N08:09.23	W089:24.53	5	208	28	On
013		330	8 Oct 03	0602	N06:32.32	W084:46.17	4	233	89	On
013		331	8 Oct 03	0919	N06:05.06	W084:41.64	4	233	33	On
013		338	9 Oct 03	1316	N03:34.17	W086:46.78	4	199	60	On
013		340	9 Oct 03	1528	N03:25.39	W086:56.44	4	199	15	On
013		345	10 Oct 03	0759	N02:12.34	W088:28.14	5	126	1	On
013		350	10 Oct 03	1027	N01:58.62	W088:40.11	4	200	11	On
013		351	10 Oct 03	1253	N01:49.96	W088:59.00	5	126	26	On
013		354	10 Oct 03	1752	N01:27.50	W089:21.80	5	73	62	On
013		356	11 Oct 03	0728	N00:33.23	W090:37.68	4	224	39	On
013		357	11 Oct 03	0802	N00:29.09	W090:38.32	4	233	183	On
013		359	11 Oct 03	0843	N00:25.41	W090:41.33	4	199	33	On
013		363	11 Oct 03	1138	N00:04.90	W090:57.63	4	224	178	On
013		375	12 Oct 03	1727	S01:42.24	W093:19.53	4	73	94	On
013		376	12 Oct 03	1827	S01:43.78	W093:29.05	4	224	11	On
013		378	13 Oct 03	0853	S02:51.16	W095:06.46	3	224	125	On
013		392	14 Oct 03	1747	S05:32.54	W098:40.93	4	126	122	On
013		393	14 Oct 03	1822	S05:31.23	W098:44.75	4	126	26	On
013		395	15 Oct 03	0909	S06:44.34	W100:16.14	5	200	32	On
013		402	17 Oct 03	1855	S09:26.88	W099:39.42	5	224	89	On
013		403	18 Oct 03	1502	S09:15.17	W097:01.32	5	199	203	On
013		518	11 Nov 03	0953	N05:09.02	W080:41.63	4	126	56	On
013		520	12 Nov 03	0720	N05:16.13	W083:02.07	4	233	17	On
013		524	12 Nov 03	1552	N06:21.92	W082:37.06	3	224	53	On
013		529	13 Nov 03	0744	N06:24.93	W080:47.34	2	200	50	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
013		532	13 Nov 03	0856	N06:20.15	W080:42.63	2	126	72	On
013		534	13 Nov 03	0925	N06:15.34	W080:40.31	2	73	7	Off
013		535	13 Nov 03	0953	N06:17.46	W080:34.75	2	199	40	On
013		536	13 Nov 03	1122	N06:19.96	W080:22.35	2	126	59	On
013		542	13 Nov 03	1607	N06:25.15	W079:44.89	2	199	22	On
013		623	23 Nov 03	0654	N08:38.75	W087:46.09	3	200	40	On
013		626	23 Nov 03	0755	N08:37.92	W087:48.58	3	200	165	On
013		630	23 Nov 03	0957	N08:45.64	W087:58.94	3	126	33	On
013		633	23 Nov 03	1211	N08:56.56	W088:09.64	1	126	36	On
013		634	23 Nov 03	1219	N08:56.32	W088:05.07	1	200	11	On
013	017	646	23 Nov 03	1611	N09:06.03	W088:24.03	3	126	112	On
013		652	24 Nov 03	0828	N09:36.03	W090:13.11	2	199	29	On
013		656	24 Nov 03	0940	N09:37.32	W090:24.14	0	73	30	On
013		657	24 Nov 03	1002	N09:41.92	W090:25.78	0	233	122	On
013		658	24 Nov 03	1005	N09:42.23	W090:23.70	0	233	40	On
013		661	24 Nov 03	1051	N09:45.93	W090:28.81	0	73	20	On
013		679	24 Nov 03	1640	N09:51.14	W091:07.99	1	233	127	On
013		682	24 Nov 03	1732	N09:50.69	W091:14.57	2	73	140	On
013		685	25 Nov 03	0713	N09:24.76	W092:43.60	1	200	40	On
013		686	25 Nov 03	0720	N09:23.73	W092:47.51	1	73	250	Off
013		687	25 Nov 03	0744	N09:23.21	W092:48.69	1	224	96	On
013		692	25 Nov 03	0952	N09:18.71	W092:58.11	2	84	5	Off
013		693	25 Nov 03	1044	N09:17.32	W092:57.69	2	200	55	On
013		694	25 Nov 03	1115	N09:11.22	W092:58.40	2	224	27	On
013		696	25 Nov 03	1325	N09:08.48	W093:06.86	2	199	45	On
013		702	25 Nov 03	1436	N09:04.91	W093:12.46	2	233	64	On
013		704	25 Nov 03	1515	N09:07.47	W093:17.07	2	73	43	On
013		705	25 Nov 03	1551	N09:08.27	W093:20.78	2	200	82	On
013		706	25 Nov 03	1633	N09:06.33	W093:26.42	2	199	86	On
013		708	25 Nov 03	1728	N09:01.98	W093:30.23	3	199	62	On
013		709	25 Nov 03	1813	N09:01.70	W093:37.69	3	233	73	On
013		712	26 Nov 03	0754	N08:24.70	W095:07.74	3	199	33	On
013		715	26 Nov 03	1124	N08:19.52	W095:37.28	2	199	97	On
013		716	26 Nov 03	1211	N08:16.93	W095:41.09	2	200	108	On
013		718	26 Nov 03	1310	N08:14.04	W095:44.33	2	200	18	Off
013		719	26 Nov 03	1319	N08:12.56	W095:47.51	2	73	86	On
013		722	26 Nov 03	1529	N08:06.47	W096:01.39	2	199	112	On
013		724	26 Nov 03	1645	N08:08.96	W096:08.88	2	73	15	On
013		727	26 Nov 03	1726	N08:04.19	W096:13.79	2	126	84	On
013		728	27 Nov 03	0651	N08:49.43	W097:44.12	3	126	111	On
013		729	27 Nov 03	1100	N08:58.33	W098:25.18	3	233	56	On
013		730	27 Nov 03	1203	N08:59.86	W098:28.43	4	200	79	On
013		731	27 Nov 03	1237	N09:05.85	W098:31.12	3	233	6	On
013		736	27 Nov 03	1533	N09:12.43	W098:44.12	2	199	15	On
013		765	1 Dec 03	1840	N14:17.79	W110:45.66	4	233	22	On
013		782	6 Dec 03	1153	N23:26.15	W119:33.16	1	73	74	On
013		784	6 Dec 03	1425	N23:50.00	W119:28.20	2	199	193	On
013		788	7 Dec 03	1109	N25:56.38	W119:10.87	3	73	145	On
013		789	7 Dec 03	1156	N26:00.72	W119:08.71	3	200	36	On
013		791	7 Dec 03	1224	N26:04.13	W119:10.66	2	199	136	On
013		793	7 Dec 03	1646	N26:34.68	W119:03.31	3	199	22	On
013		1048	5 Aug 03	1435	N24:39.70	W114:39.57	4	233	37	On
013		1052	6 Aug 03	1253	N22:47.67	W115:01.68	4	224	21	On
013		1070	8 Aug 03	1440	N22:41.30	W111:07.95	1	233	30	Off
013		1074	8 Aug 03	1534	N22:33.77	W111:10.64	1	126	21	On
013		1077	8 Aug 03	1658	N22:32.33	W111:14.08	1	233	58	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
013		1099	9 Aug 03	1311	N21:41.29	W110:06.76	1	224	35	On
013		1102	9 Aug 03	1426	N21:48.31	W110:00.72	1	199	25	On
013		1104	9 Aug 03	1512	N21:49.56	W109:56.84	1	200	16	On
013		1105	9 Aug 03	1541	N21:53.28	W109:53.42	1	199	38	On
013	017	1107	9 Aug 03	1749	N22:00.11	W109:51.12	2	200	87	On
013		1109	9 Aug 03	1856	N22:06.54	W109:48.02	2	199	5	On
013		1185	15 Aug 03	0907	N21:41.06	W107:56.07	2	73	7	On
013		1194	15 Aug 03	1809	N20:51.02	W108:14.20	1	199	11	On
013		1217	21 Aug 03	1150	N17:38.66	W105:21.28	1	233	19	On
013		1224	21 Aug 03	1517	N17:33.87	W105:45.80	1	224	19	On
013		1225	21 Aug 03	1542	N17:33.03	W105:48.86	1	233	28	On
013		1230	21 Aug 03	1847	N17:25.54	W106:01.21	2	73	65	On
013		1235	22 Aug 03	1158	N16:59.56	W107:55.09	3	73	26	On
013		1239	22 Aug 03	1727	N16:45.11	W108:38.31	3	126	49	On
013		1242	23 Aug 03	0758	N16:16.10	W110:22.03	3	73	23	On
013		1244	23 Aug 03	1154	N16:05.08	W110:53.90	3	199	37	On
013		1254	24 Aug 03	0854	N15:25.00	W113:23.59	4	233	58	On
013		1255	24 Aug 03	0932	N15:24.55	W113:27.91	4	233	23	On
013		1259	25 Aug 03	1727	N14:11.18	W117:38.14	4	200	32	On
013		1261	26 Aug 03	0826	N13:45.12	W119:23.29	2	224	52	On
013		1267	28 Aug 03	0917	N10:55.59	W124:03.86	4	200	30	On
013		1281	30 Aug 03	1457	N11:27.08	W119:14.97	4	233	41	On
013		1283	30 Aug 03	1624	N11:34.28	W119:07.06	2	126	16	On
013		1289	31 Aug 03	0913	N12:04.75	W117:27.76	2	73	18	On
013		1290	31 Aug 03	1004	N12:06.73	W117:24.72	3	73	25	On
013		1378	26 Sep 03	0933	N10:39.82	W088:38.55	3	233	33	On
013		1379	26 Sep 03	1020	N10:45.01	W088:36.12	3	224	26	On
013		1384	26 Sep 03	1408	N11:06.37	W088:40.04	2	73	41	On
013		1385	26 Sep 03	1503	N11:06.76	W088:41.18	2	200	14	On
013		1386	26 Sep 03	1522	N11:09.34	W088:38.56	2	73	101	On
013		1388	26 Sep 03	1649	N11:16.50	W088:34.38	1	224	39	On
013		1391	26 Sep 03	1745	N11:22.68	W088:35.38	1	233	32	On
013		1446	11 Oct 03	1044	N06:12.54	W092:39.32	4	228	51	On
013		1450	11 Oct 03	1336	N06:16.78	W092:43.74	4	228	17	On
013		1461	15 Oct 03	0820	N06:07.56	W102:31.22	4	7	37	On
013		1466	16 Oct 03	1554	N06:01.07	W106:39.57	4	125	32	On
013		1587	4 Nov 03	0836	N10:38.75	W108:45.58	5	231	25	Off
013		1592	6 Nov 03	0904	N07:46.79	W113:05.14	3	7	38	On
013		1593	6 Nov 03	1140	N07:31.59	W113:24.31	3	208	35	On
013		1595	6 Nov 03	1823	N06:59.08	W114:04.38	4	7	33	On
013		1596	7 Nov 03	0725	N06:07.18	W115:32.80	3	125	9	On
013		1599	7 Nov 03	0826	N06:00.84	W115:40.62	3	228	115	On
013		1603	7 Nov 03	1509	N05:31.31	W116:27.38	4	230	27	On
013		1628	13 Nov 03	1823	N13:16.74	W108:58.67	4	1	19	On
013		1678	23 Nov 03	0844	N18:36.59	W107:19.04	4	230	23	On
013		1681	23 Nov 03	1106	N18:32.93	W107:38.71	4	125	47	On
013		1697	25 Nov 03	1342	N17:02.75	W114:17.91	3	1	19	On
013		1712	1 Dec 03	1302	N19:43.63	W113:00.94	4	125	62	On
013		1713	1 Dec 03	1456	N19:46.17	W112:45.96	4	7	44	On
013		1714	1 Dec 03	1517	N19:46.59	W112:42.72	4	7	83	On
013		1716	1 Dec 03	1654	N19:48.23	W112:25.95	4	208	27	On
013		1720	3 Dec 03	1334	N21:50.97	W111:59.25	4	230	47	On
013		1728	7 Dec 03	0637	N26:50.64	W116:57.18	2	230	40	On
<i>Steno bredanensis</i>										
015		58	9 Aug 03	1608	N07:19.32	W127:53.24	4	125	14	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
015		73	12 Aug 03	1546	N13:00.46	W133:32.48	2	7	13	On
015		147	20 Aug 03	1132	N08:49.32	W145:11.28	1	125	5	Off
015		229	13 Sep 03	1549	N05:05.27	W131:24.30	4	125	8	Off
015		231	13 Sep 03	1658	N05:00.80	W131:18.30	4	1	3	Off
015		244	17 Sep 03	1340	S00:10.37	W120:03.07	4	230	7	On
015		255	20 Sep 03	1457	N03:07.37	W114:21.02	4	230	14	Off
015		266	22 Sep 03	1015	N03:51.18	W107:48.44	4	228	10	On
015	018	323	29 Sep 03	1534	N09:17.22	W086:25.98	4	1	12	On
015		606	21 Nov 03	1640	N09:03.94	W084:14.31	3	200	18	On
015		663	24 Nov 03	1055	N09:44.44	W090:29.71	0	224	17	On
015	018	1092	9 Aug 03	1130	N21:41.65	W110:12.33	1	200	22	On
015		1197	16 Aug 03	0932	N20:09.39	W106:22.86	3	73	11	On
015		1204	16 Aug 03	1653	N19:51.04	W105:36.26	4	4	5	Off
015		1205	16 Aug 03	1744	N19:45.46	W105:27.96	4	73	9	On
015		1206	16 Aug 03	1806	N19:44.11	W105:24.87	4	126	6	On
015		1210	20 Aug 03	1715	N18:15.91	W103:37.67	3	73	8	On
015	002 010	1222	21 Aug 03	1316	N17:34.81	W105:34.81	1	126	146	On
015		1228	21 Aug 03	1817	N17:28.23	W105:59.00	1	233	17	On
015		1236	22 Aug 03	1307	N16:56.33	W108:04.64	3	199	13	On
015		1240	22 Aug 03	1817	N16:43.73	W108:42.71	2	233	5	On
015	018	1241	22 Aug 03	1846	N16:42.07	W108:45.91	2	233	10	On
015		1250	23 Aug 03	1414	N16:02.94	W111:13.93	3	224	8	On
015		1262	26 Aug 03	1030	N13:39.89	W119:38.00	3	126	12	On
015		1282	30 Aug 03	1540	N11:28.48	W119:13.03	3	199	13	On
015		1325	19 Sep 03	1713	N14:13.67	W100:02.22	3	126	5	On
015		1327	20 Sep 03	0811	N13:20.90	W101:27.64	2	126	8	On
015		1331	21 Sep 03	1220	N13:09.95	W099:12.03	1	199	15	On
015		1333	21 Sep 03	1554	N13:11.50	W098:52.09	4	227	1	Off
015	018	1336	22 Sep 03	1642	N13:27.67	W095:44.85	4	199	24	On
015		1338	22 Sep 03	1758	N13:28.03	W095:35.43	3	73	10	On
015		1392	26 Sep 03	1802	N11:22.96	W088:34.40	1	233	13	Off
015		1417	28 Sep 03	1459	N11:38.18	W086:49.77	2	126	4	On
015		1438	9 Oct 03	1227	N06:13.74	W088:01.73	5	228	9	On
015		1441	10 Oct 03	1129	N06:03.32	W090:15.56	5	7	4	On
015		1448	11 Oct 03	1232	N06:14.58	W092:40.49	4	208	16	Off
015	018	1488	21 Oct 03	1113	N11:39.90	W098:23.96	3	208	10	On
015		1493	22 Oct 03	1736	N11:56.39	W095:17.20	5	125	6	On
015	018	1562	31 Oct 03	1412	N14:47.29	W097:51.75	2	208	7	On
015	018	1579	2 Nov 03	1659	N13:29.80	W104:02.94	2	228	12	On
015		1626	13 Nov 03	1630	N13:12.72	W109:11.37	4	230	6	On
015		1641	16 Nov 03	0815	N16:42.75	W101:40.02	2	208	5	On
015		1643	16 Nov 03	1213	N16:57.72	W101:04.65	1	208	7	On
015		1644	16 Nov 03	1215	N16:59.24	W101:07.11	1	125	6	Off
015		1647	16 Nov 03	1313	N16:57.94	W101:02.09	1	1	3	On
015		1680	23 Nov 03	1013	N18:35.96	W107:29.25	4	228	5	On
015		1707	29 Nov 03	1455	N18:24.15	W119:12.40	3	208	9	On
<i>Delphinus capensis</i>										
016	025	441	31 Oct 03	1331	S11:52.73	W077:25.33	2	73	68	On
016	025	442	31 Oct 03	1523	S11:46.18	W077:37.22	3	126	168	On
016	025	452	2 Nov 03	1013	S09:50.21	W078:39.52	3	34	219	On
016		454	2 Nov 03	1152	S09:44.01	W078:34.42	2	199	128	On
016	025	456	2 Nov 03	1723	S09:25.07	W078:43.29	3	200	136	On
016	025	468	3 Nov 03	1306	S08:55.03	W079:20.74	4	224	360	On
016		470	3 Nov 03	1723	S08:33.58	W079:14.90	4	126	429	On
016		476	4 Nov 03	1155	S07:30.11	W079:59.85	3	233	38	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
016	025	480	4 Nov 03	1453	S07:27.66	W079:57.56	4	73	145	On
016		482	4 Nov 03	1726	S07:16.63	W079:49.38	4	224	301	On
016		1004	31 Jul 03	1711	N32:07.05	W117:02.59	2	199	873	On
016		1006	31 Jul 03	1812	N32:01.16	W116:56.82	2	73	315	On
016		1011	1 Aug 03	1243	N29:30.24	W115:32.87	5	233	123	On
016		1043	4 Aug 03	0811	N25:45.34	W113:12.76	4	233	142	On
016		1044	4 Aug 03	1629	N24:50.36	W112:20.29	4	233	33	On
016		1046	4 Aug 03	1820	N24:49.50	W112:31.19	5	199	351	On
016		1059	7 Aug 03	1749	N24:09.02	W111:54.68	4	73	103	On
016		1156	12 Aug 03	1306	N25:38.05	W109:26.24	2	233	461	On
016		1157	12 Aug 03	1325	N25:37.20	W109:27.37	2	224	55	On
<i>Delphinus delphis</i>										
017		4	29 Jul 03	1857	N32:14.61	W117:15.04	2	208	453	On
017		6	30 Jul 03	0710	N30:58.76	W117:17.34	4	125	304	On
017		7	30 Jul 03	0737	N30:54.74	W117:19.70	4	228	280	On
017		46	8 Aug 03	0856	N08:43.32	W126:48.16	4	1	103	On
017		47	8 Aug 03	0954	N08:39.29	W126:49.23	4	208	121	On
017		64	10 Aug 03	1745	N09:03.26	W129:19.86	4	7	21	On
017		66	11 Aug 03	0853	N10:05.36	W130:39.53	4	228	108	On
017		304	27 Sep 03	1630	N06:46.92	W090:58.04	4	208	140	On
017		305	28 Sep 03	0653	N07:42.64	W089:33.16	5	228	71	On
017		313	28 Sep 03	1050	N08:10.57	W089:22.00	5	228	180	On
017		318	28 Sep 03	1519	N08:39.53	W089:13.98	5	228	305	On
017		319	29 Sep 03	0656	N09:15.80	W087:17.24	4	125	277	On
017		321	29 Sep 03	0939	N09:20.12	W087:01.12	4	231	255	Off
017		326	7 Oct 03	0626	N08:46.35	W084:47.45	4	99	2	Off
017		327	7 Oct 03	0631	N08:45.51	W084:48.21	4	200	68	On
017		362	11 Oct 03	1119	N00:05.18	W090:55.96	4	224	168	On
017		367	12 Oct 03	0648	S01:25.98	W091:59.19	4	224	181	On
017		370	12 Oct 03	0901	S01:31.57	W092:14.74	4	200	390	On
017		372	12 Oct 03	0955	S01:32.81	W092:23.68	4	73	90	Off
017		373	12 Oct 03	1230	S01:40.29	W092:38.36	4	73	128	On
017		374	12 Oct 03	1425	S01:35.83	W092:54.23	4	200	281	On
017		381	13 Oct 03	1052	S02:56.21	W095:20.28	3	73	160	Off
017		387	14 Oct 03	1110	S04:58.85	W097:50.44	3	126	60	On
017		489	5 Nov 03	1656	S05:17.37	W081:25.89	5	224	600	On
017		500	7 Nov 03	0629	S02:08.85	W081:15.47	4	224	418	On
017	006	517	9 Nov 03	1345	N01:05.27	W079:42.25	5	126	255	On
017		519	11 Nov 03	1106	N05:10.80	W080:50.86	4	233	66	On
017		525	12 Nov 03	1621	N06:26.99	W082:35.87	2	126	30	On
017		526	12 Nov 03	1736	N06:27.06	W082:32.39	2	73	30	Off
017		537	13 Nov 03	1216	N06:22.34	W080:17.85	2	199	28	On
017		541	13 Nov 03	1508	N06:22.09	W079:49.46	2	224	48	On
017		595	21 Nov 03	0659	N08:19.08	W083:33.47	2	126	70	On
017		613	22 Nov 03	1151	N08:34.64	W086:01.18	2	233	102	On
017		614	22 Nov 03	1248	N08:33.47	W086:06.38	3	224	11	On
017		617	22 Nov 03	1546	N08:27.69	W086:13.73	2	200	77	On
017		620	22 Nov 03	1637	N08:27.74	W086:24.06	2	233	113	On
017		627	23 Nov 03	0819	N08:39.93	W087:54.10	3	126	223	On
017		628	23 Nov 03	0901	N08:42.20	W087:58.61	3	199	156	On
017		631	23 Nov 03	1031	N08:49.18	W087:58.11	3	199	63	On
017		636	23 Nov 03	1315	N08:56.83	W088:14.03	1	199	294	On
017		638	23 Nov 03	1319	N08:59.52	W088:10.79	1	224	120	Off
017		640	23 Nov 03	1414	N09:01.16	W088:16.80	2	199	33	On
017		644	23 Nov 03	1521	N09:06.15	W088:20.54	2	73	103	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
017	013	646	23 Nov 03	1611	N09:06.03	W088:24.03	3	126	112	On
017		650	24 Nov 03	0727	N09:34.16	W090:04.99	2	126	95	On
017		653	24 Nov 03	0909	N09:36.97	W090:20.31	1	233	135	On
017		664	24 Nov 03	1126	N09:46.42	W090:37.68	0	126	382	On
017		688	25 Nov 03	0813	N09:18.98	W092:50.19	1	199	49	On
017		690	25 Nov 03	0928	N09:17.03	W092:54.41	2	73	57	On
017	002	744	29 Nov 03	0730	N10:36.85	W104:10.02	5	73	18	On
017		752	29 Nov 03	1337	N11:34.29	W104:50.42	4	233	35	On
017		792	7 Dec 03	1522	N26:26.64	W119:04.14	2	200	162	On
017		1049	5 Aug 03	1553	N24:34.78	W114:54.70	4	200	73	On
017		1055	7 Aug 03	1007	N23:58.06	W112:30.60	4	200	383	On
017		1095	9 Aug 03	1219	N21:42.84	W110:06.39	1	233	54	On
017		1100	9 Aug 03	1332	N21:42.48	W110:04.06	1	200	109	On
017	013	1107	9 Aug 03	1749	N22:00.11	W109:51.12	2	200	87	On
017		1108	9 Aug 03	1822	N22:03.49	W109:50.18	2	73	33	On
017		1111	10 Aug 03	0659	N23:08.91	W108:58.24	5	224	46	On
017		1112	10 Aug 03	0732	N23:10.30	W108:54.14	5	126	71	On
017		1115	10 Aug 03	0946	N23:23.03	W108:53.80	3	199	49	On
017		1116	10 Aug 03	1056	N23:31.57	W108:56.27	2	199	75	On
017		1121	10 Aug 03	1434	N23:53.35	W109:09.00	2	200	122	On
017		1208	20 Aug 03	1623	N18:22.31	W103:43.52	4	233	43	On
017		1266	28 Aug 03	0850	N10:57.34	W124:04.26	4	73	65	On
017		1271	28 Aug 03	1243	N10:36.95	W124:10.30	4	73	200	On
017		1274	29 Aug 03	0827	N10:06.52	W122:56.16	3	73	150	On
017		1276	29 Aug 03	1526	N10:26.59	W121:59.19	4	233	125	On
017		1288	31 Aug 03	0819	N12:03.30	W117:34.12	2	233	21	On
017		1346	23 Sep 03	1037	N13:33.26	W093:35.55	3	126	26	On
017		1348	23 Sep 03	1443	N13:35.26	W092:58.69	2	126	203	On
017		1371	26 Sep 03	0644	N10:20.18	W088:40.13	3	200	59	On
017		1374	26 Sep 03	0726	N10:23.45	W088:35.74	3	73	93	On
017		1375	26 Sep 03	0751	N10:24.03	W088:36.22	3	73	25	Off
017		1376	26 Sep 03	0801	N10:25.44	W088:37.39	3	126	50	On
017		1377	26 Sep 03	0845	N10:32.48	W088:38.14	3	224	14	On
017		1544	30 Oct 03	1249	N15:41.33	W095:29.35	1	230	148	On
017		1548	30 Oct 03	1517	N15:38.75	W095:39.36	2	208	12	On
017		1549	30 Oct 03	1618	N15:37.55	W095:49.11	2	125	143	On
017		1563	31 Oct 03	1509	N14:52.23	W097:58.02	3	1	87	On
017		1614	11 Nov 03	1520	N10:32.34	W114:45.16	4	1	157	On
017		1619	12 Nov 03	0953	N11:31.38	W112:37.49	4	208	95	On
017		1646	16 Nov 03	1254	N16:56.60	W101:03.56	1	230	54	On
017		1651	17 Nov 03	0737	N17:40.68	W102:01.30	2	125	98	On
017		1718	3 Dec 03	0946	N21:21.63	W111:46.84	5	228	89	On
017		1729	7 Dec 03	0927	N27:14.44	W117:13.87	3	125	78	On
017		1730	7 Dec 03	1003	N27:19.84	W117:15.25	2	125	26	On
017		1731	7 Dec 03	1157	N27:32.67	W117:26.08	4	208	44	On
017		1732	7 Dec 03	1343	N27:49.50	W117:31.97	1	1	286	On
017		1734	8 Dec 03	1215	N29:14.53	W118:11.53	5	228	37	On
017		1738	9 Dec 03	1015	N31:33.23	W116:51.60	2	7	105	On
<i>Tursiops truncatus</i>										
018	077	26	31 Jul 03	1717	N27:46.02	W121:17.35	1	125	30	Off
018		94	14 Aug 03	1418	N12:29.77	W136:28.89	3	208	15	On
018	036	104	15 Aug 03	1053	N10:15.60	W136:55.38	1	125	20	On
018	036	208	11 Sep 03	1228	N09:20.42	W137:56.20	2	7	33	On
018	036	209	11 Sep 03	1350	N09:22.03	W137:49.91	1	208	32	On
018	034	242	17 Sep 03	0725	S00:42.03	W120:26.90	4	208	48	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
018	036	292	26 Sep 03	1137	N05:13.17	W094:33.44	4	125	21	On
018	036	316	28 Sep 03	1231	N08:20.65	W089:20.60	5	230	19	On
018	036	322	29 Sep 03	1342	N09:20.07	W086:32.17	3	208	26	On
018	015	323	29 Sep 03	1534	N09:17.22	W086:25.98	4	1	12	On
018		325	29 Sep 03	1727	N09:20.08	W086:16.74	4	1	7	Off
018		329	7 Oct 03	1626	N07:38.62	W084:47.99	4	199	7	Off
018		366	11 Oct 03	1748	S00:43.28	W090:44.27	4	233	47	On
018		406	19 Oct 03	0655	S09:04.01	W095:06.47	5	126	5	Off
018	277	417	21 Oct 03	1318	S09:12.77	W088:57.77	4	99	6	Off
018	021 036	418	21 Oct 03	1818	S09:57.82	W088:45.69	4	73	48	On
018	034	421	22 Oct 03	0955	S11:48.82	W088:14.37	4	98	18	Off
018	034 021	423	22 Oct 03	1134	S11:56.33	W088:10.51	4	199	108	On
018		424	22 Oct 03	1233	S11:59.12	W088:07.31	4	233	8	On
018	036	430	24 Oct 03	1019	S14:46.74	W084:39.34	4	199	42	On
018	036	432	24 Oct 03	1436	S14:40.75	W084:23.26	4	199	45	On
018		446	1 Nov 03	1521	S10:25.75	W078:30.37	3	233	253	On
018		449	2 Nov 03	0640	S10:04.87	W078:55.62	4	126	2795	On
018		450	2 Nov 03	0747	S09:56.88	W078:54.03	4	73	467	On
018		459	3 Nov 03	0624	S09:29.80	W079:39.37	3	233	28	On
018		461	3 Nov 03	0655	S09:27.23	W079:37.91	3	126	1	On
018		465	3 Nov 03	0948	S09:06.04	W079:20.35	4	200	35	On
018		473	4 Nov 03	0944	S07:45.42	W080:09.43	4	224	10	On
018		475	4 Nov 03	1056	S07:38.78	W080:04.59	3	199	7	On
018	025	493	6 Nov 03	0931	S03:40.94	W081:16.10	4	199	47	On
018		494	6 Nov 03	1117	S03:28.39	W081:07.80	4	73	49	On
018		495	6 Nov 03	1331	S03:23.83	W080:54.50	3	199	22	On
018		496	6 Nov 03	1349	S03:21.27	W080:54.78	4	73	25	On
018		502	7 Nov 03	1316	S01:19.49	W081:01.50	4	233	6	On
018		512	9 Nov 03	0646	N00:55.81	W080:13.64	4	233	2	On
018		516	9 Nov 03	1139	N01:14.56	W080:01.68	5	199	67	On
018	021	531	13 Nov 03	0846	N06:23.43	W080:43.23	2	233	43	Off
018		551	14 Nov 03	1512	N07:50.40	W078:43.98	3	200	13	On
018		552	14 Nov 03	1544	N07:51.33	W078:49.16	3	199	25	On
018		553	14 Nov 03	1626	N07:54.11	W078:52.43	3	233	30	On
018		561	19 Nov 03	1429	N08:18.16	W079:33.40	2	126	10	On
018		562	19 Nov 03	1450	N08:15.60	W079:29.55	2	199	25	On
018		563	19 Nov 03	1552	N08:08.27	W079:30.65	1	233	8	On
018		564	19 Nov 03	1621	N08:05.83	W079:37.01	1	199	9	On
018		565	19 Nov 03	1646	N08:03.71	W079:39.90	2	233	11	On
018		566	19 Nov 03	1707	N08:01.86	W079:41.49	2	233	12	On
018		580	20 Nov 03	0848	N07:20.29	W081:18.01	2	224	40	On
018		582	20 Nov 03	0934	N07:16.26	W081:23.00	2	126	1	On
018		583	20 Nov 03	0935	N07:16.14	W081:21.85	2	126	1	On
018		584	20 Nov 03	0937	N07:17.24	W081:22.86	2	200	20	On
018		585	20 Nov 03	0946	N07:14.41	W081:22.02	2	126	1	On
018		586	20 Nov 03	1046	N07:05.10	W081:29.49	2	233	31	On
018	036	596	21 Nov 03	0710	N08:19.78	W083:35.18	2	126	32	Off
018		600	21 Nov 03	1014	N08:27.60	W083:46.72	2	199	20	On
018		607	21 Nov 03	1754	N09:07.25	W084:16.13	3	126	24	Off
018	036	612	22 Nov 03	0918	N08:35.00	W085:55.36	2	126	64	On
018	021	621	22 Nov 03	1649	N08:26.20	W086:22.05	1	126	22	On
018	036	632	23 Nov 03	1103	N08:50.69	W088:00.25	1	200	101	On
018		666	24 Nov 03	1221	N09:49.16	W090:42.07	0	199	51	On
018		670	24 Nov 03	1408	N09:51.00	W090:47.60	1	233	1	On
018		676	24 Nov 03	1542	N09:53.58	W090:55.75	1	199	11	On
018		681	24 Nov 03	1647	N09:53.46	W091:04.93	1	233	12	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
018	036	721	26 Nov 03	1446	N08:05.58	W095:55.90	2	233	57	On
018		737	27 Nov 03	1553	N09:12.44	W098:44.07	2	73	7	Off
018	036	1031	2 Aug 03	1841	N27:37.77	W115:08.22	5	126	44	On
018		1045	4 Aug 03	1736	N24:49.38	W112:29.16	5	200	20	On
018	037	1056	7 Aug 03	1236	N23:58.67	W112:18.35	2	199	13	On
018		1060	7 Aug 03	1834	N24:11.01	W111:52.93	4	233	30	On
018		1061	8 Aug 03	0722	N23:20.50	W110:45.76	2	200	17	On
018		1062	8 Aug 03	0803	N23:17.01	W110:42.30	2	199	11	On
018		1063	8 Aug 03	0843	N23:15.18	W110:35.36	2	233	13	On
018		1064	8 Aug 03	0952	N23:07.41	W110:36.76	2	73	10	On
018		1065	8 Aug 03	1009	N23:05.45	W110:37.66	2	200	52	On
018	015	1092	9 Aug 03	1130	N21:41.65	W110:12.33	1	200	22	On
018		1113	10 Aug 03	0843	N23:17.43	W108:51.35	4	73	17	On
018	021	1124	10 Aug 03	1739	N24:12.05	W109:23.70	2	73	29	On
018		1126	11 Aug 03	0653	N25:26.69	W110:18.79	2	233	57	On
018		1127	11 Aug 03	0743	N25:30.99	W110:20.90	2	224	16	On
018	021	1129	11 Aug 03	0824	N25:34.90	W110:22.77	2	233	52	On
018		1134	11 Aug 03	1156	N26:00.48	W110:37.35	3	224	54	On
018		1135	11 Aug 03	1237	N26:04.21	W110:41.43	2	233	29	On
018	021	1137	11 Aug 03	1333	N26:13.34	W110:48.55	2	126	71	On
018		1140	11 Aug 03	1437	N26:16.44	W110:51.75	2	224	11	On
018		1146	11 Aug 03	1649	N26:32.37	W111:05.85	2	199	32	On
018		1148	11 Aug 03	1730	N26:34.77	W111:07.60	2	200	13	On
018		1150	11 Aug 03	1816	N26:42.71	W111:06.35	3	199	65	On
018		1151	11 Aug 03	1929	N26:46.13	W111:12.87	3	73	20	On
018		1152	12 Aug 03	0826	N26:03.69	W109:54.34	4	73	49	On
018		1162	13 Aug 03	0701	N24:20.19	W108:10.76	2	200	34	Off
018		1163	13 Aug 03	0804	N24:17.04	W108:08.13	2	126	138	On
018	002	1164	13 Aug 03	0854	N24:15.01	W108:03.15	2	199	145	On
018		1171	13 Aug 03	1743	N23:32.08	W107:18.76	3	233	47	On
018		1176	14 Aug 03	1058	N21:43.83	W106:10.88	3	73	29	On
018		1183	15 Aug 03	0714	N21:49.52	W107:41.32	2	126	3	On
018		1186	15 Aug 03	0927	N21:40.09	W107:54.33	2	73	18	Off
018	002	1187	15 Aug 03	1021	N21:42.28	W107:57.14	2	73	179	On
018		1234	22 Aug 03	0958	N17:01.57	W107:39.36	2	126	7	On
018	015	1241	22 Aug 03	1846	N16:42.07	W108:45.91	2	233	10	On
018		1252	23 Aug 03	1648	N15:55.81	W111:32.59	3	224	11	On
018		1265	27 Aug 03	1522	N12:38.43	W123:20.09	4	224	49	On
018		1285	30 Aug 03	1832	N11:35.53	W118:58.74	2	224	18	On
018		1293	31 Aug 03	1643	N12:23.26	W116:38.11	5	73	78	On
018	015	1336	22 Sep 03	1642	N13:27.67	W095:44.85	4	199	24	On
018		1337	22 Sep 03	1730	N13:27.69	W095:39.22	4	224	15	On
018		1341	23 Sep 03	0752	N13:29.43	W094:02.23	2	126	16	On
018		1344	23 Sep 03	1003	N13:32.45	W093:43.09	3	4	4	Off
018		1345	23 Sep 03	1016	N13:32.52	W093:40.90	3	199	31	On
018		1352	24 Sep 03	1034	N13:42.91	W090:46.28	4	199	6	On
018		1353	24 Sep 03	1056	N13:38.13	W090:46.96	3	126	31	On
018		1355	24 Sep 03	1151	N13:36.26	W090:41.33	3	73	23	On
018		1356	24 Sep 03	1239	N13:31.11	W090:39.86	4	73	10	On
018		1357	24 Sep 03	1246	N13:28.13	W090:39.90	4	73	23	On
018		1359	24 Sep 03	1326	N13:25.74	W090:37.37	4	200	29	On
018		1360	24 Sep 03	1356	N13:21.86	W090:35.22	4	200	17	On
018		1361	24 Sep 03	1413	N13:20.69	W090:32.94	4	224	36	On
018	021	1366	25 Sep 03	1204	N12:04.96	W089:43.14	4	73	42	On
018		1368	25 Sep 03	1514	N11:37.95	W089:43.80	4	73	25	On
018		1370	25 Sep 03	1818	N11:06.68	W089:46.35	2	126	31	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
018		1394	27 Sep 03	0911	N12:33.26	W088:52.72	3	233	12	On
018		1395	27 Sep 03	1025	N12:36.10	W088:45.97	2	233	17	On
018 006		1400	27 Sep 03	1245	N12:40.16	W088:33.88	2	126	144	On
018		1402	27 Sep 03	1416	N12:39.06	W088:31.58	1	200	7	On
018		1404	27 Sep 03	1510	N12:38.99	W088:26.59	1	199	15	On
018		1405	27 Sep 03	1531	N12:39.25	W088:22.59	1	200	8	On
018		1410	28 Sep 03	0746	N11:51.51	W087:44.17	4	199	25	On
018		1411	28 Sep 03	0822	N11:51.55	W087:38.43	4	233	20	On
018		1413	28 Sep 03	1134	N11:46.23	W087:13.88	3	224	1	On
018 090		1414	28 Sep 03	1202	N11:43.78	W087:09.33	3	126	42	On
018		1415	28 Sep 03	1336	N11:40.04	W086:58.73	3	73	12	On
018 277		1421	28 Sep 03	1825	N11:29.10	W086:22.79	3	199	2	On
018 006		1427	29 Sep 03	0847	N10:17.14	W085:58.79	2	233	30	On
018		1434	29 Sep 03	1451	N09:42.55	W085:27.78	4	199	83	On
018 036		1444	11 Oct 03	0616	N06:11.61	W092:07.36	4	125	26	On
018		1455	12 Oct 03	1143	N06:21.71	W095:05.77	4	230	5	On
018 015		1488	21 Oct 03	1113	N11:39.90	W098:23.96	3	208	10	On
018		1490	21 Oct 03	1805	N11:35.57	W097:39.09	4	228	20	On
018		1496	23 Oct 03	1159	N12:49.45	W093:16.06	3	208	27	On
018		1497	23 Oct 03	1238	N12:53.04	W093:11.43	3	1	22	On
018 006		1504	28 Oct 03	0912	N13:48.53	W090:56.27	1	230	53	On
018		1505	28 Oct 03	1028	N13:48.53	W091:10.22	1	228	10	On
018		1507	28 Oct 03	1202	N13:46.81	W091:21.12	0	125	5	On
018		1508	28 Oct 03	1203	N13:47.38	W091:21.32	0	208	2	On
018		1527	29 Oct 03	0843	N15:05.90	W093:12.80	1	125	6	Off
018 090		1529	29 Oct 03	1005	N15:05.49	W093:29.22	1	208	6	On
018		1530	29 Oct 03	1102	N15:06.10	W093:34.04	3	1	8	On
018 021		1532	29 Oct 03	1454	N15:09.27	W094:04.16	1	1	131	On
018 021		1534	29 Oct 03	1632	N15:11.40	W094:13.44	0	1	84	On
018		1536	30 Oct 03	0623	N16:04.37	W094:35.83	1	1	5	On
018 021		1543	30 Oct 03	1225	N15:40.96	W095:25.42	1	7	7	On
018 021		1545	30 Oct 03	1341	N15:41.02	W095:29.31	1	1	20	Off
018 015		1562	31 Oct 03	1412	N14:47.29	W097:51.75	2	208	7	On
018 021		1566	1 Nov 03	1401	N15:15.87	W100:47.66	1	125	111	On
018		1578	2 Nov 03	1650	N13:30.69	W103:59.58	2	208	5	On
018 015		1579	2 Nov 03	1659	N13:29.80	W104:02.94	2	228	12	On
018		1589	4 Nov 03	1134	N10:22.64	W109:07.86	5	208	42	On
018		1689	24 Nov 03	1005	N17:54.11	W110:29.76	4	208	46	On
018 002		1690	24 Nov 03	1205	N17:51.81	W110:42.44	4	230	41	On
018		1711	1 Dec 03	0847	N19:33.72	W113:40.42	4	208	32	On
018 021		1723	5 Dec 03	0842	N21:58.90	W116:52.03	4	228	81	On
018		1726	6 Dec 03	1352	N24:57.08	W115:46.40	2	4	21	Off
<i>Grampus griseus</i>										
021		16	30 Jul 03	1851	N29:46.91	W118:40.66	3	1	9	On
021		100	15 Aug 03	0803	N10:34.54	W136:52.05	2	125	19	On
021 032		112	15 Aug 03	1847	N09:21.94	W136:56.94	2	125	42	On
021 377		160	20 Aug 03	1904	N08:16.05	W146:10.10	1	1	10	Off
021		164	21 Aug 03	0920	N07:23.36	W147:41.51	3	208	10	On
021		238	16 Sep 03	0731	N00:29.83	W123:25.30	4	125	12	On
021		249	19 Sep 03	1755	N02:56.50	W116:49.06	4	1	7	On
021 277		334	9 Oct 03	0627	N04:07.33	W085:55.42	5	224	5	On
021		335	9 Oct 03	1032	N03:44.67	W086:27.79	4	73	3	On
021		343	10 Oct 03	0655	N02:18.53	W088:21.22	5	73	4	On
021		396	15 Oct 03	1247	S07:07.22	W100:46.01	6	126	8	On
021		399	17 Oct 03	0759	S09:43.91	W101:20.88	5	200	9	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
021	034	409	20 Oct 03	1027	S08:34.77	W091:14.43	4	199	26	On
021	036 018	418	21 Oct 03	1818	S09:57.82	W088:45.69	4	73	48	On
021	034 018	423	22 Oct 03	1134	S11:56.33	W088:10.51	4	199	108	On
021		434	25 Oct 03	1317	S13:39.15	W081:39.02	5	126	22	On
021		463	3 Nov 03	0727	S09:19.08	W079:34.92	3	199	75	On
021		464	3 Nov 03	0902	S09:09.53	W079:29.11	3	73	7	On
021		474	4 Nov 03	1021	S07:41.96	W080:06.40	4	126	5	On
021		527	13 Nov 03	0616	N06:31.53	W080:58.77	2	200	33	On
021	018	531	13 Nov 03	0846	N06:23.43	W080:43.23	2	233	43	Off
021		533	13 Nov 03	0919	N06:19.19	W080:42.76	2	73	1	Off
021		611	22 Nov 03	0847	N08:38.05	W085:52.86	3	126	20	On
021	018	621	22 Nov 03	1649	N08:26.20	W086:22.05	1	126	22	On
021		624	23 Nov 03	0654	N08:41.43	W087:44.51	3	233	12	On
021		639	23 Nov 03	1327	N08:58.01	W088:13.04	1	224	9	Off
021		659	24 Nov 03	1007	N09:40.10	W090:27.56	0	200	53	On
021		662	24 Nov 03	1054	N09:45.75	W090:29.11	0	73	15	On
021		780	6 Dec 03	0942	N23:17.51	W119:39.21	2	233	22	On
021		796	8 Dec 03	0846	N28:35.29	W118:36.21	5	233	3	On
021		1008	31 Jul 03	1920	N31:55.52	W116:53.29	2	200	15	On
021	018	1124	10 Aug 03	1739	N24:12.05	W109:23.70	2	73	29	On
021	018	1129	11 Aug 03	0824	N25:34.90	W110:22.77	2	233	52	On
021		1130	11 Aug 03	0905	N25:37.56	W110:28.21	2	199	23	On
021		1132	11 Aug 03	0957	N25:47.58	W110:28.92	2	200	28	On
021		1133	11 Aug 03	1108	N25:55.58	W110:36.62	2	233	9	On
021		1136	11 Aug 03	1313	N26:07.96	W110:47.03	2	199	14	On
021	018	1137	11 Aug 03	1333	N26:13.34	W110:48.55	2	126	71	On
021		1138	11 Aug 03	1340	N26:13.05	W110:47.75	2	200	10	On
021		1141	11 Aug 03	1459	N26:18.73	W110:52.56	2	233	79	On
021		1180	14 Aug 03	1708	N21:38.03	W106:21.96	3	126	17	On
021		1212	20 Aug 03	1850	N18:08.98	W103:31.76	2	126	11	On
021	033	1213	21 Aug 03	0656	N17:47.44	W104:50.73	2	73	12	On
021		1249	23 Aug 03	1351	N16:02.89	W111:09.30	3	233	21	On
021		1309	6 Sep 03	1246	N17:06.90	W100:57.64	1	224	28	On
021	018	1366	25 Sep 03	1204	N12:04.96	W089:43.14	4	73	42	On
021		1451	11 Oct 03	1713	N06:17.21	W093:14.29	4	208	6	On
021		1479	19 Oct 03	1454	N11:18.52	W102:56.86	1	7	13	Off
021		1480	19 Oct 03	1522	N11:18.38	W102:56.77	1	7	11	On
021	018	1532	29 Oct 03	1454	N15:09.27	W094:04.16	1	1	131	On
021		1533	29 Oct 03	1459	N15:09.34	W094:03.43	1	1	16	Off
021	018	1534	29 Oct 03	1632	N15:11.40	W094:13.44	0	1	84	On
021	018	1543	30 Oct 03	1225	N15:40.96	W095:25.42	1	7	7	On
021	018	1545	30 Oct 03	1341	N15:41.02	W095:29.31	1	1	20	Off
021		1550	30 Oct 03	1624	N15:38.57	W095:45.54	2	125	7	On
021		1551	30 Oct 03	1721	N15:35.07	W095:52.00	2	228	7	On
021		1554	31 Oct 03	0734	N14:41.39	W097:06.97	2	125	15	Off
021		1560	31 Oct 03	1259	N14:39.72	W097:41.61	2	208	2	Off
021	018	1566	1 Nov 03	1401	N15:15.87	W100:47.66	1	125	111	On
021	077	1576	2 Nov 03	1513	N13:35.90	W103:51.80	2	7	5	On
021		1635	14 Nov 03	1816	N14:39.78	W106:05.10	2	125	13	On
021	018	1723	5 Dec 03	0842	N21:58.90	W116:52.03	4	228	81	On
<i>Lagenorhynchus obliquidens</i>										
022		1010	1 Aug 03	0940	N29:49.31	W115:49.58	3	73	16	On
022		1012	1 Aug 03	1639	N28:58.73	W115:18.87	4	227	3	Off
022		1737	9 Dec 03	0902	N31:21.85	W116:58.86	2	125	6	On
022		1739	9 Dec 03	1041	N31:33.99	W116:50.99	2	208	29	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
<i>Lagenorhynchus obscurus</i>										
025		438	27 Oct 03	0610	S12:08.17	W077:24.23	2	199	135	Off
025		440	31 Oct 03	1254	S11:55.38	W077:18.76	2	126	90	On
025 016		441	31 Oct 03	1331	S11:52.73	W077:25.33	2	73	68	On
025 016		442	31 Oct 03	1523	S11:46.18	W077:37.22	3	126	168	On
025		444	1 Nov 03	0931	S10:37.72	W078:08.44	2	34	138	On
025 076		445	1 Nov 03	1157	S10:28.15	W078:08.42	2	126	364	On
025 016		452	2 Nov 03	1013	S09:50.21	W078:39.52	3	34	219	On
025		453	2 Nov 03	1131	S09:47.29	W078:36.70	2	73	340	On
025 016		456	2 Nov 03	1723	S09:25.07	W078:43.29	3	200	136	On
025 016		468	3 Nov 03	1306	S08:55.03	W079:20.74	4	224	360	On
025 016		480	4 Nov 03	1453	S07:27.66	W079:57.56	4	73	145	On
025 018		493	6 Nov 03	0931	S03:40.94	W081:16.10	4	199	47	On
<i>Lagenodelphis hosei</i>										
026		401	17 Oct 03	1747	S09:32.69	W099:45.22	5	73	60	On
<i>Peponocephala electra</i>										
031		1481	19 Oct 03	1549	N11:20.04	W102:56.16	3	1	73	On
<i>Feresa attenuata</i>										
032 021		112	15 Aug 03	1847	N09:21.94	W136:56.94	2	125	42	On
032		320	29 Sep 03	0915	N09:20.09	W087:01.12	4	228	29	On
<i>Pseudorca crassidens</i>										
033		282	25 Sep 03	1159	N04:44.37	W097:00.05	4	230	15	On
033		283	25 Sep 03	1250	N04:48.51	W096:56.14	4	1	6	On
033		285	25 Sep 03	1318	N04:47.50	W096:54.46	4	228	7	On
033		286	25 Sep 03	1339	N04:48.36	W096:52.36	4	125	5	On
033		287	25 Sep 03	1410	N04:46.20	W096:47.18	4	230	4	On
033		288	25 Sep 03	1450	N04:46.48	W096:41.09	4	125	6	On
033		776	4 Dec 03	1024	N18:35.06	W117:54.79	4	233	30	On
033 021		1213	21 Aug 03	0656	N17:47.44	W104:50.73	2	73	12	On
<i>Globicephala sp.</i>										
034 018		242	17 Sep 03	0725	S00:42.03	W120:26.90	4	208	48	On
034		368	12 Oct 03	0742	S01:26.19	W092:07.30	4	126	5	On
034		405	18 Oct 03	1837	S09:12.46	W096:31.95	5	84	9	Off
034		408	19 Oct 03	1745	S08:52.51	W093:17.71	4	224	19	On
034 021		409	20 Oct 03	1027	S08:34.77	W091:14.43	4	199	26	On
034 018		421	22 Oct 03	0955	S11:48.82	W088:14.37	4	98	18	Off
034		422	22 Oct 03	1106	S11:53.88	W088:11.39	4	126	7	On
034 018 021		423	22 Oct 03	1134	S11:56.33	W088:10.51	4	199	108	On
034		426	22 Oct 03	1425	S12:14.10	W088:06.96	4	200	6	On
<i>Globicephala macrorhynchus</i>										
036		31	1 Aug 03	1319	N25:55.35	W123:40.78	3	208	19	On
036		70	11 Aug 03	1721	N10:59.19	W131:36.49	5	125	45	On
036		81	13 Aug 03	1122	N14:32.19	W135:11.80	3	208	12	Off
036		96	14 Aug 03	1612	N12:13.35	W136:32.03	3	230	20	On
036 018		104	15 Aug 03	1053	N10:15.60	W136:55.38	1	125	20	On
036		105	15 Aug 03	1232	N10:14.84	W136:50.43	2	7	28	On
036		106	15 Aug 03	1256	N10:11.98	W136:51.35	4	228	12	On
036		107	15 Aug 03	1312	N10:10.88	W136:52.46	4	230	20	On
036		108	15 Aug 03	1336	N10:08.11	W136:54.72	4	7	7	On
036		115	16 Aug 03	1551	N06:34.06	W137:36.43	5	230	11	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
036		178	26 Aug 03	1507	N20:27.49	W157:05.72	5	1	13	Off
036 077		189	9 Sep 03	1346	N12:13.88	W142:34.27	5	230	14	On
036 077		197	10 Sep 03	1413	N10:34.82	W140:01.11	4	208	19	On
036 018		208	11 Sep 03	1228	N09:20.42	W137:56.20	2	7	33	On
036 018		209	11 Sep 03	1350	N09:22.03	W137:49.91	1	208	32	On
036		217	11 Sep 03	1726	N09:05.34	W137:32.68	2	99	1	Off
036		239	16 Sep 03	1205	N00:04.15	W122:51.47	5	228	25	On
036		284	25 Sep 03	1311	N04:48.28	W096:54.03	4	1	18	Off
036		291	26 Sep 03	0854	N05:10.19	W094:40.95	4	125	9	On
036 018		292	26 Sep 03	1137	N05:13.17	W094:33.44	4	125	21	On
036		302	27 Sep 03	1412	N06:45.13	W091:17.09	4	7	14	Off
036		314	28 Sep 03	1124	N08:12.45	W089:20.05	5	125	13	On
036 018		316	28 Sep 03	1231	N08:20.65	W089:20.60	5	230	19	On
036 018		322	29 Sep 03	1342	N09:20.07	W086:32.17	3	208	26	On
036		353	10 Oct 03	1556	N01:34.60	W089:17.97	5	200	19	On
036		384	13 Oct 03	1711	S03:19.23	W095:48.81	4	73	20	On
036 021 018		418	21 Oct 03	1818	S09:57.82	W088:45.69	4	73	48	On
036 018		430	24 Oct 03	1019	S14:46.74	W084:39.34	4	199	42	On
036 018		432	24 Oct 03	1436	S14:40.75	W084:23.26	4	199	45	On
036		530	13 Nov 03	0824	N06:23.72	W080:46.30	2	99	8	Off
036 018		596	21 Nov 03	0710	N08:19.78	W083:35.18	2	126	32	Off
036 018		612	22 Nov 03	0918	N08:35.00	W085:55.36	2	126	64	On
036 018		632	23 Nov 03	1103	N08:50.69	W088:00.25	1	200	101	On
036 018		721	26 Nov 03	1446	N08:05.58	W095:55.90	2	233	57	On
036		786	7 Dec 03	0734	N25:38.01	W119:13.17	1	200	56	On
036 018		1031	2 Aug 03	1841	N27:37.77	W115:08.22	5	126	44	On
036 018		1444	11 Oct 03	0616	N06:11.61	W092:07.36	4	125	26	On
036		1458	12 Oct 03	1659	N06:26.46	W095:32.39	3	230	10	On
036		1465	16 Oct 03	1245	N05:59.20	W106:13.32	4	208	21	On
036		1469	17 Oct 03	0709	N06:00.97	W108:13.60	4	125	31	On
036		1470	17 Oct 03	0956	N06:20.91	W107:57.50	4	1	38	On
036		1471	18 Oct 03	1334	N09:20.41	W105:14.61	4	230	22	On
036 077		1601	7 Nov 03	1058	N05:46.46	W115:58.69	3	230	17	On
036		1602	7 Nov 03	1200	N05:44.76	W116:00.43	4	230	5	On
036		1724	5 Dec 03	1357	N22:45.69	W116:37.03	4	208	12	On
036		1725	5 Dec 03	1637	N23:01.25	W116:29.56	3	7	30	On
<i>Orcinus orca</i>										
037		136	19 Aug 03	1259	N09:15.84	W142:43.55	4	125	2	On
037		138	19 Aug 03	1531	N09:28.54	W143:03.15	3	125	3	On
037		163	21 Aug 03	0738	N07:32.90	W147:31.48	2	7	1	Off
037		202	11 Sep 03	0728	N09:28.45	W138:20.08	2	1	5	Off
037		243	17 Sep 03	1036	S00:20.89	W120:14.12	4	208	13	On
037		543	13 Nov 03	1719	N06:28.84	W079:33.76	2	126	5	On
037		781	6 Dec 03	0943	N23:14.07	W119:37.66	2	98	1	Off
037		1054	7 Aug 03	0716	N23:47.99	W112:52.81	3	199	1	Off
037 018		1056	7 Aug 03	1236	N23:58.67	W112:18.35	2	199	13	On
037 072		1085	9 Aug 03	0702	N21:47.44	W110:19.44	2	200	24	On
037		1181	14 Aug 03	1839	N21:43.97	W106:33.74	3	200	12	On
037		1297	4 Sep 03	1358	N16:20.27	W105:19.75	4	73	5	Off
037		1382	26 Sep 03	1126	N10:56.17	W088:39.28	3	199	22	On
037		1447	11 Oct 03	1149	N06:12.38	W092:41.37	4	208	4	On
037		1617	12 Nov 03	0835	N11:25.13	W112:42.52	4	125	5	On
<i>Phocoena spinipinnis</i>										
042		439	31 Oct 03	1208	S11:58.67	W077:16.84	2	224	6	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
<i>Physeter macrocephalus</i>										
046		32	1 Aug 03	1707	N25:48.39	W123:47.79	4	208	24	On
046		38	5 Aug 03	1536	N17:21.41	W127:28.70	4	125	2	On
046		72	12 Aug 03	1416	N12:55.96	W133:33.29	4	98	11	Off
046		90	14 Aug 03	1030	N12:51.16	W136:18.76	1	1	1	Off
046		113	16 Aug 03	1104	N07:16.06	W137:24.77	4	230	6	On
046		174	26 Aug 03	0836	N19:24.79	W156:52.66	4	228	5	On
046		175	26 Aug 03	1126	N19:50.94	W156:58.67	6	125	2	On
046		181	5 Sep 03	0824	N19:23.77	W156:29.65	2	125	6	On
046		183	5 Sep 03	0951	N19:11.92	W156:16.80	3	208	11	On
046		270	22 Sep 03	1450	N03:55.39	W107:06.99	4	1	1	On
046		328	7 Oct 03	1432	N07:33.88	W084:50.21	4	200	25	On
046		385	14 Oct 03	0745	S04:43.72	W097:42.31	3	199	1	On
046		386	14 Oct 03	0818	S04:52.61	W097:42.91	3	200	8	On
046		388	14 Oct 03	1120	S05:02.57	W097:52.03	3	199	1	On
046		397	16 Oct 03	0734	S08:50.70	W103:12.17	5	73	1	On
046		404	18 Oct 03	1825	S09:12.27	W096:31.70	5	126	2	On
046		410	20 Oct 03	1437	S08:32.48	W090:53.43	4	29	1	On
046		412	20 Oct 03	1743	S08:32.16	W090:37.33	4	199	3	On
046		505	8 Nov 03	0611	S00:00.75	W080:44.22	4	200	1	On
046		785	6 Dec 03	1514	N23:50.68	W119:31.75	2	233	3	Off
046		1033	3 Aug 03	1009	N26:44.93	W115:01.73	6	200	1	On
046		1610	10 Nov 03	0957	N08:47.52	W118:23.59	3	7	3	On
046		1705	29 Nov 03	1133	N18:21.08	W119:33.39	4	230	1	On
<i>Kogia sima</i>										
048		15	30 Jul 03	1514	N30:13.81	W118:13.42	2	1	1	On
048		28	1 Aug 03	0846	N26:23.89	W123:04.86	2	208	1	On
048		142	20 Aug 03	0850	N09:00.52	W144:58.01	1	228	1	On
048		154	20 Aug 03	1605	N08:36.07	W145:48.45	1	7	1	On
048		155	20 Aug 03	1608	N08:35.33	W145:48.82	1	7	1	On
048		203	11 Sep 03	0842	N09:26.94	W138:22.74	2	1	2	Off
048		619	22 Nov 03	1623	N08:28.96	W086:16.50	2	73	2	On
048		642	23 Nov 03	1417	N08:58.86	W088:17.93	2	73	1	Off
048		655	24 Nov 03	0939	N09:36.97	W090:23.45	0	73	1	On
048		1073	8 Aug 03	1516	N22:37.67	W111:11.02	1	73	1	On
048		1081	8 Aug 03	1807	N22:29.52	W111:19.86	2	233	1	On
048		1101	9 Aug 03	1415	N21:45.69	W110:00.07	1	73	1	On
048		1103	9 Aug 03	1504	N21:49.64	W109:59.27	1	126	1	On
048		1143	11 Aug 03	1541	N26:25.97	W110:58.95	2	73	1	On
048		1145	11 Aug 03	1610	N26:30.82	W111:00.15	2	200	1	On
048		1220	21 Aug 03	1241	N17:37.01	W105:26.54	1	199	1	On
048		1223	21 Aug 03	1456	N17:31.73	W105:42.53	1	73	1	On
048		1310	6 Sep 03	1320	N17:07.50	W100:56.52	1	73	1	Off
048		1495	23 Oct 03	1026	N12:40.67	W093:31.31	3	7	2	On
048		1565	1 Nov 03	0915	N15:28.47	W100:04.81	1	7	1	On
048		1568	1 Nov 03	1524	N15:14.09	W100:54.75	1	125	1	On
048		1570	1 Nov 03	1536	N15:13.71	W100:55.86	1	125	1	On
048		1640	16 Nov 03	0746	N16:41.13	W101:44.58	2	228	1	On
<i>ziphid whale</i>										
049		55	9 Aug 03	0851	N06:32.10	W127:00.32	4	1	2	On
049		383	13 Oct 03	1539	S03:10.81	W095:38.76	4	199	1	On
049		400	17 Oct 03	1010	S09:41.72	W101:01.24	5	99	1	Off
049		540	13 Nov 03	1422	N06:23.37	W079:55.93	2	233	2	On
049		735	27 Nov 03	1449	N09:11.62	W098:42.79	2	126	1	Off

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
049		1040	3 Aug 03	1800	N27:01.28	W114:23.89	5	199	7	Off
049		1066	8 Aug 03	1306	N22:48.50	W110:60.00	2	126	1	On
049		1125	10 Aug 03	1837	N24:13.19	W109:26.38	2	126	4	On
049		1216	21 Aug 03	1142	N17:36.99	W105:20.99	1	200	1	On
049		1343	23 Sep 03	0959	N13:29.70	W093:42.49	4	73	1	On
049		1564	1 Nov 03	0637	N15:24.82	W099:37.68	2	1	1	On
049		1604	7 Nov 03	1711	N05:19.09	W116:37.41	4	208	2	On
049		1613	10 Nov 03	1727	N09:14.50	W117:31.39	2	231	1	Off
049		1637	15 Nov 03	1314	N15:42.12	W103:56.98	3	4	1	Off
<i>Mesoplodon</i> sp.										
051		11	30 Jul 03	0928	N30:42.41	W117:30.89	2	125	2	On
051		29	1 Aug 03	0950	N26:19.44	W123:16.01	1	125	4	On
051		61	10 Aug 03	1123	N08:15.35	W128:46.25	5	1	2	On
051		74	12 Aug 03	1651	N13:05.00	W133:36.62	3	125	3	On
051		95	14 Aug 03	1542	N12:18.28	W136:30.26	3	125	1	On
051		176	26 Aug 03	1433	N20:21.33	W157:05.26	5	1	2	On
051		177	26 Aug 03	1505	N20:27.20	W157:05.49	5	1	2	On
051		190	9 Sep 03	1459	N12:09.39	W142:27.12	5	7	1	On
051		391	14 Oct 03	1646	S05:25.66	W098:31.06	4	224	1	On
051		436	26 Oct 03	1156	S12:33.41	W078:36.97	5	224	1	On
051		528	13 Nov 03	0647	N06:26.73	W080:56.83	2	73	3	On
051		1120	10 Aug 03	1317	N23:45.19	W109:05.14	3	73	3	Off
051		1123	10 Aug 03	1731	N24:09.39	W109:23.40	2	126	2	On
051		1131	11 Aug 03	0948	N25:44.44	W110:29.06	2	200	2	On
051		1193	15 Aug 03	1747	N20:55.57	W108:14.73	1	200	2	On
051		1195	15 Aug 03	1906	N20:43.26	W108:11.78	0	200	3	On
051		1286	30 Aug 03	1919	N11:34.52	W118:56.39	2	199	2	Off
051		1298	4 Sep 03	1756	N16:27.86	W105:04.17	4	233	2	On
051		1307	6 Sep 03	1153	N17:06.11	W101:00.02	2	199	2	On
051		1330	21 Sep 03	1047	N13:10.09	W099:24.54	3	73	1	On
051		1558	31 Oct 03	1103	N14:30.97	W097:27.74	2	208	2	On
051		1567	1 Nov 03	1453	N15:14.50	W100:50.04	1	230	3	On
051		1569	1 Nov 03	1535	N15:14.34	W100:56.77	1	125	2	On
051		1573	1 Nov 03	1740	N15:07.75	W101:11.86	1	1	2	On
051		1600	7 Nov 03	1040	N05:47.65	W115:57.33	3	125	3	On
051		1632	14 Nov 03	1410	N14:25.16	W106:33.21	2	125	3	On
051		1701	26 Nov 03	1642	N16:19.17	W117:43.37	4	1	3	On
<i>Ziphius cavirostris</i>										
061		207	11 Sep 03	1208	N09:23.42	W138:02.17	2	125	2	On
061		227	13 Sep 03	1512	N05:05.37	W131:29.76	4	1	3	On
061		341	9 Oct 03	1550	N03:24.22	W086:55.23	4	199	2	On
061		610	22 Nov 03	0805	N08:44.82	W085:48.73	2	73	2	On
061		651	24 Nov 03	0823	N09:37.22	W090:11.47	2	224	1	On
061		669	24 Nov 03	1401	N09:51.21	W090:47.45	1	233	1	On
061		717	26 Nov 03	1249	N08:15.39	W095:41.15	2	73	4	On
061		760	1 Dec 03	1318	N14:32.45	W110:04.69	4	233	1	On
061		1086	9 Aug 03	0846	N21:49.97	W110:23.69	2	227	1	Off
061		1122	10 Aug 03	1443	N23:52.57	W109:10.55	2	200	2	Off
061		1218	21 Aug 03	1231	N17:38.68	W105:26.06	1	73	1	On
061		1221	21 Aug 03	1311	N17:34.96	W105:30.80	1	126	1	On
061		1248	23 Aug 03	1312	N16:05.98	W111:02.38	3	199	1	On
061		1277	30 Aug 03	0807	N11:08.02	W120:05.39	2	200	2	On
061		1318	18 Sep 03	0701	N16:02.45	W098:22.07	3	126	1	Off
061		1323	19 Sep 03	0812	N14:52.36	W098:58.54	4	73	1	Off

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft No.	Obs No.	School Size	Ef- fort
061		1328	20 Sep 03	1410	N12:56.26	W101:48.29	3	224	3	On
061		1462	15 Oct 03	1009	N06:05.85	W102:46.85	4	1	3	On
061		1464	16 Oct 03	1028	N06:02.27	W105:50.89	4	208	1	On
061		1559	31 Oct 03	1120	N14:32.06	W097:29.63	2	7	2	On
061		1575	2 Nov 03	1308	N13:46.40	W103:35.19	4	1	2	On
061		1607	9 Nov 03	1648	N07:42.71	W120:28.66	4	1	2	Off
<i>Berardius bairdii</i>										
063		12	30 Jul 03	1130	N30:35.31	W117:45.96	2	1	4	On
063		1057	7 Aug 03	1342	N24:03.46	W112:21.05	2	73	4	Off
<i>Balaenoptera</i> sp.										
070		1	29 Jul 03	1826	N32:18.10	W117:16.57	0	230	2	Off
070		8	30 Jul 03	0747	N30:54.60	W117:18.91	4	1	1	Off
070		60	10 Aug 03	1039	N08:14.74	W128:44.24	4	208	1	On
070		68	11 Aug 03	1136	N10:21.41	W130:53.08	4	98	1	Off
070		116	17 Aug 03	0620	N04:49.32	W137:55.45	5	7	1	On
070		134	19 Aug 03	1137	N09:09.52	W142:33.26	4	208	1	On
070		139	19 Aug 03	1533	N09:30.86	W143:03.07	3	208	1	Off
070		192	10 Sep 03	0627	N11:07.83	W140:47.97	5	208	5	On
070	077	220	12 Sep 03	1221	N07:23.91	W135:01.51	5	228	20	On
070		222	13 Sep 03	0750	N05:44.30	W132:17.27	4	7	1	On
070		224	13 Sep 03	0903	N05:33.17	W132:10.60	5	208	1	Off
070		233	14 Sep 03	0704	N03:58.46	W129:30.47	4	7	1	On
070		257	20 Sep 03	1553	N03:09.33	W114:15.08	4	7	1	Off
070		262	21 Sep 03	0931	N03:31.38	W111:45.30	4	7	1	On
070		336	9 Oct 03	1057	N03:41.32	W086:26.53	4	126	1	On
070		377	13 Oct 03	0836	S02:44.62	W095:05.39	3	29	1	On
070		379	13 Oct 03	0959	S02:53.31	W095:15.82	3	200	2	On
070		415	21 Oct 03	1014	S09:02.07	W089:05.07	5	199	1	Off
070		419	22 Oct 03	0727	S11:27.43	W088:16.30	4	199	1	On
070		471	3 Nov 03	1747	S08:34.20	W079:15.88	4	224	2	On
070		594	20 Nov 03	1807	N07:33.28	W082:09.31	3	224	1	Off
070	075 072	647	23 Nov 03	1624	N09:06.49	W088:28.62	3	126	5	Off
070		738	28 Nov 03	0846	N09:43.43	W101:03.99	4	126	1	On
070		773	3 Dec 03	1116	N16:48.78	W114:48.51	4	126	1	On
070		1015	2 Aug 03	0633	N28:39.24	W115:41.86	4	4	1	Off
070		1016	2 Aug 03	0645	N28:36.02	W115:38.82	4	126	4	On
070		1023	2 Aug 03	1337	N27:54.57	W115:32.23	4	233	1	On
070		1028	2 Aug 03	1734	N27:44.03	W115:16.29	5	200	1	On
070		1035	3 Aug 03	1444	N26:54.55	W114:38.58	5	224	1	On
070	074	1036	3 Aug 03	1449	N26:53.85	W114:36.81	5	126	6	On
070		1037	3 Aug 03	1510	N26:54.38	W114:31.84	5	199	1	On
070	074	1039	3 Aug 03	1727	N26:59.71	W114:23.40	5	199	7	On
070		1041	3 Aug 03	1909	N27:01.49	W114:19.70	5	126	2	On
070		1051	5 Aug 03	1816	N24:30.11	W115:08.86	4	126	1	On
070		1096	9 Aug 03	1240	N21:44.41	W110:04.29	1	224	1	Off
070		1149	11 Aug 03	1737	N26:39.72	W111:07.58	3	126	1	On
070		1516	28 Oct 03	1603	N13:50.51	W091:55.88	2	208	1	Off
070		1519	28 Oct 03	1625	N13:51.43	W091:56.48	2	208	1	On
070		1605	9 Nov 03	1300	N07:25.37	W121:01.87	4	1	1	Off
070		1702	27 Nov 03	0759	N15:49.97	W119:43.94	5	1	1	On
070		1709	30 Nov 03	0820	N18:50.00	W117:04.04	4	7	1	On
<i>Balaenoptera acutorostrata</i>										
071		1009	1 Aug 03	0621	N30:20.63	W116:04.23	2	73	1	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
<i>Balaenoptera edeni</i>										
072		59	10 Aug 03	0902	N08:03.88	W128:36.57	4	125	1	Off
072	002 011	98	14 Aug 03	1846	N11:52.75	W136:28.68	4	1	525	On
072		225	13 Sep 03	0909	N05:32.16	W132:10.45	5	208	1	On
072		226	13 Sep 03	1248	N05:11.24	W131:47.95	4	228	1	On
072		236	14 Sep 03	1604	N03:12.38	W128:21.26	5	208	8	On
072		237	14 Sep 03	1731	N03:07.21	W128:17.15	4	208	1	On
072		245	17 Sep 03	1416	S00:03.44	W120:00.97	4	208	2	On
072		251	20 Sep 03	0830	N03:03.39	W115:11.00	4	208	1	On
072		339	9 Oct 03	1352	N03:29.93	W086:51.54	4	200	7	On
072		342	9 Oct 03	1614	N03:20.58	W087:00.57	4	126	3	On
072		352	10 Oct 03	1337	N01:46.82	W089:04.03	5	233	2	On
072		382	13 Oct 03	1154	S02:58.51	W095:20.16	4	224	2	On
072		481	4 Nov 03	1530	S07:23.91	W079:54.40	4	233	1	On
072		498	6 Nov 03	1528	S03:19.60	W080:38.37	4	73	1	On
072		507	8 Nov 03	0757	N00:01.64	W080:36.21	4	126	1	On
072	075 070	647	23 Nov 03	1624	N09:06.49	W088:28.62	3	126	5	Off
072		734	27 Nov 03	1437	N09:10.85	W098:42.96	2	199	2	On
072		767	2 Dec 03	1044	N15:24.74	W112:30.59	4	126	1	On
072		1034	3 Aug 03	1246	N26:52.82	W114:39.83	5	233	1	On
072		1038	3 Aug 03	1539	N26:57.33	W114:28.85	5	224	1	Off
072		1067	8 Aug 03	1325	N22:46.61	W111:03.24	2	224	5	On
072		1071	8 Aug 03	1513	N22:38.39	W111:10.32	1	200	2	On
072		1072	8 Aug 03	1516	N22:37.27	W111:11.29	1	199	1	On
072		1075	8 Aug 03	1625	N22:36.95	W111:11.94	1	224	1	Off
072		1076	8 Aug 03	1648	N22:35.85	W111:14.24	1	224	1	On
072		1078	8 Aug 03	1702	N22:32.66	W111:15.92	1	92	1	Off
072		1080	8 Aug 03	1803	N22:29.80	W111:20.44	2	233	1	On
072	075	1084	8 Aug 03	1928	N22:20.41	W111:19.71	2	200	3	On
072	037	1085	9 Aug 03	0702	N21:47.44	W110:19.44	2	200	24	On
072		1089	9 Aug 03	1020	N21:48.78	W110:20.30	1	73	2	On
072		1128	11 Aug 03	0755	N25:33.31	W110:22.32	2	73	2	On
072		1153	12 Aug 03	1018	N25:51.92	W109:39.87	3	233	1	On
072		1154	12 Aug 03	1119	N25:46.82	W109:36.06	3	233	1	On
072		1155	12 Aug 03	1158	N25:41.57	W109:36.46	3	233	1	On
072		1159	12 Aug 03	1741	N25:18.85	W109:13.30	4	199	1	On
072		1161	13 Aug 03	0655	N24:23.50	W108:09.07	2	200	1	On
072		1169	13 Aug 03	1452	N23:45.68	W107:37.28	3	4	1	Off
072		1260	25 Aug 03	1920	N14:07.39	W117:53.81	4	199	1	On
072		1295	1 Sep 03	1654	N13:30.80	W113:18.69	5	233	1	On
072		1362	24 Sep 03	1540	N13:08.66	W090:28.75	4	224	3	On
072		1399	27 Sep 03	1209	N12:40.33	W088:37.31	2	227	1	Off
072		1454	12 Oct 03	1021	N06:18.31	W095:02.13	4	228	2	On
072		1486	21 Oct 03	1001	N11:45.71	W098:29.82	4	208	1	On
072		1675	22 Nov 03	1741	N19:04.60	W105:31.59	5	125	1	On
072		1700	26 Nov 03	0954	N16:31.86	W116:46.53	4	125	1	On
072		1708	29 Nov 03	1725	N18:28.36	W118:53.47	3	125	1	On
072		1715	1 Dec 03	1522	N19:46.37	W112:40.45	4	208	1	Off
<i>Balaenoptera physalus</i>										
074		431	24 Oct 03	1128	S14:46.74	W084:41.91	4	227	1	Off
074		778	5 Dec 03	1023	N20:55.28	W119:38.12	4	199	1	On
074		1013	1 Aug 03	1729	N28:48.84	W115:18.03	5	73	6	On
074	070	1036	3 Aug 03	1449	N26:53.85	W114:36.81	5	126	6	On
074	070	1039	3 Aug 03	1727	N26:59.71	W114:23.40	5	199	7	On
074		1139	11 Aug 03	1340	N26:12.24	W110:47.74	2	126	2	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
<i>Balaenoptera musculus</i>										
075		371	12 Oct 03	0937	S01:31.23	W092:23.13	4	73	2	On
075		414	21 Oct 03	0731	S08:49.86	W089:10.70	5	224	2	On
075		416	21 Oct 03	1123	S09:05.69	W089:01.64	4	233	2	On
075		420	22 Oct 03	0917	S11:47.61	W088:15.95	4	233	2	On
075		428	23 Oct 03	0813	S14:26.54	W087:25.00	5	233	2	On
075		433	25 Oct 03	0931	S13:45.04	W081:56.74	4	199	1	On
075	072	070	647	23 Nov 03	1624	N09:06.49	W088:28.62	3	126	5 Off
075		660	24 Nov 03	1011	N09:42.67	W090:29.08	0	233	1	Off
075		668	24 Nov 03	1229	N09:49.26	W090:41.13	0	73	1	Off
075		674	24 Nov 03	1432	N09:53.36	W090:53.15	1	233	1	On
075		683	24 Nov 03	1744	N09:53.29	W091:13.76	2	233	1	Off
075		689	25 Nov 03	0825	N09:18.91	W092:52.66	1	199	1	Off
075		691	25 Nov 03	0937	N09:17.87	W092:56.43	2	199	1	On
075		695	25 Nov 03	1157	N09:08.04	W093:03.85	2	126	1	On
075		697	25 Nov 03	1254	N09:09.13	W093:08.79	2	99	2	Off
075		732	27 Nov 03	1328	N09:08.84	W098:36.28	3	126	1	On
075		779	5 Dec 03	1515	N21:07.32	W120:11.18	4	233	2	On
075		795	8 Dec 03	0741	N28:31.47	W118:41.00	5	233	1	On
075		1014	1 Aug 03	1906	N28:46.36	W115:18.09	4	199	5	On
075		1017	2 Aug 03	0741	N28:29.98	W115:34.52	4	126	4	On
075		1018	2 Aug 03	0804	N28:26.95	W115:32.11	4	126	2	On
075		1019	2 Aug 03	0847	N28:23.91	W115:31.14	3	233	2	On
075		1020	2 Aug 03	1051	N28:15.51	W115:28.13	4	4	1	Off
075		1021	2 Aug 03	1145	N28:14.16	W115:29.73	4	73	1	Off
075		1022	2 Aug 03	1232	N28:04.12	W115:31.62	4	126	1	On
075		1024	2 Aug 03	1509	N27:50.69	W115:26.95	5	200	9	On
075		1025	2 Aug 03	1657	N27:47.93	W115:23.25	5	233	2	On
075		1026	2 Aug 03	1715	N27:47.06	W115:20.72	5	233	3	On
075		1027	2 Aug 03	1728	N27:45.34	W115:18.48	5	200	1	On
075		1029	2 Aug 03	1809	N27:41.22	W115:11.95	5	199	2	On
075		1030	2 Aug 03	1831	N27:40.64	W115:09.05	5	199	2	On
075		1047	5 Aug 03	1024	N24:45.53	W114:20.44	4	233	1	On
075		1079	8 Aug 03	1710	N22:29.82	W111:18.51	1	199	1	Off
075		1082	8 Aug 03	1833	N22:24.24	W111:24.68	2	200	1	On
075	072	1084	8 Aug 03	1928	N22:20.41	W111:19.71	2	200	3	On
075		1087	9 Aug 03	0926	N21:51.36	W110:26.36	2	126	1	Off
075		1088	9 Aug 03	0936	N21:49.13	W110:22.91	2	199	1	Off
075		1332	21 Sep 03	1318	N13:11.75	W099:04.32	4	233	1	On
075		1389	26 Sep 03	1717	N11:19.78	W088:31.03	1	199	1	Off
075		1721	3 Dec 03	1648	N21:50.75	W112:24.45	4	229	1	Off
075		1722	3 Dec 03	1650	N21:52.51	W112:24.41	4	125	1	On
075		1727	6 Dec 03	1606	N25:22.52	W116:08.08	3	228	1	On
075		1735	8 Dec 03	1315	N29:20.66	W118:07.63	5	1	1	On
<i>Megaptera novaeangliae</i>										
076		443	1 Nov 03	0716	S10:54.48	W078:19.31	3	199	2	On
076	025	445	1 Nov 03	1157	S10:28.15	W078:08.42	2	126	364	On
076		447	1 Nov 03	1525	S10:26.95	W078:32.11	3	233	4	On
076		448	2 Nov 03	0602	S10:10.71	W079:03.38	4	73	2	Off
076		477	4 Nov 03	1211	S07:27.65	W079:58.39	3	199	1	Off
076		478	4 Nov 03	1230	S07:28.82	W079:57.61	3	73	3	On
076		479	4 Nov 03	1435	S07:32.70	W079:55.18	3	233	2	Off
076		483	5 Nov 03	0604	S06:24.75	W081:10.62	3	73	6	On
076		484	5 Nov 03	0616	S06:24.51	W081:10.38	3	73	2	On
076		485	5 Nov 03	0741	S06:22.21	W081:07.38	2	73	4	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
076		486	5 Nov 03	0911	S06:13.95	W081:10.89	2	224	4	On
076		488	5 Nov 03	1335	S05:41.60	W081:17.38	5	199	2	On
076		491	6 Nov 03	0653	S03:50.60	W081:19.71	5	73	2	On
076		492	6 Nov 03	0824	S03:43.39	W081:17.66	5	199	1	On
076		501	7 Nov 03	1010	S01:45.90	W080:58.70	4	200	2	On
076		503	7 Nov 03	1336	S01:16.42	W081:02.46	4	73	1	Off
076		504	7 Nov 03	1731	S01:06.87	W081:03.51	4	73	2	On
076		509	8 Nov 03	1146	N00:09.98	W080:18.32	4	233	2	On
076 099		510	8 Nov 03	1359	N00:24.03	W080:13.69	4	73	3	On
unid. dolphin										
077		3	29 Jul 03	1852	N32:15.36	W117:16.98	0	228	1	Off
077		5	30 Jul 03	0707	N30:57.86	W117:14.71	4	228	1	Off
077		9	30 Jul 03	0830	N30:49.23	W117:24.55	4	228	1	On
077		10	30 Jul 03	0838	N30:47.69	W117:23.91	4	230	3	On
077		14	30 Jul 03	1500	N30:14.19	W118:13.01	2	125	2	On
077		19	31 Jul 03	0850	N28:39.09	W120:10.68	1	125	25	On
077 018		26	31 Jul 03	1717	N27:46.02	W121:17.35	1	125	30	Off
077		35	5 Aug 03	0738	N18:35.50	W127:19.99	4	1	20	On
077		36	5 Aug 03	1050	N18:07.19	W127:32.60	5	7	60	On
077		44	8 Aug 03	0735	N08:55.46	W126:48.96	4	125	24	On
077		53	9 Aug 03	0657	N06:22.12	W126:47.85	4	125	5	On
077		54	9 Aug 03	0827	N06:25.97	W126:58.90	4	1	30	On
077		63	10 Aug 03	1550	N08:48.89	W129:14.65	4	125	4	On
077		65	11 Aug 03	0837	N10:05.61	W130:35.44	4	7	20	On
077		67	11 Aug 03	1014	N10:14.68	W130:44.40	5	1	3	On
077		84	13 Aug 03	1629	N15:04.16	W135:52.00	3	208	15	Off
077		87	14 Aug 03	0740	N13:15.72	W136:18.75	2	208	5	Off
077 011 013 002		91	14 Aug 03	1128	N12:40.65	W136:23.62	2	208	304	On
077		93	14 Aug 03	1345	N12:33.05	W136:29.21	3	228	1	On
077		109	15 Aug 03	1358	N10:05.75	W137:00.20	4	7	12	On
077		114	16 Aug 03	1416	N06:46.05	W137:33.44	5	1	15	On
077		119	17 Aug 03	1818	N05:33.66	W138:56.19	4	125	3	On
077 011 002		120	18 Aug 03	0649	N06:34.55	W140:07.65	4	7	117	On
077		121	18 Aug 03	0821	N06:45.21	W140:14.65	4	208	11	On
077		126	18 Aug 03	1519	N07:27.48	W140:55.30	3	208	20	On
077		128	18 Aug 03	1803	N07:37.89	W141:14.25	3	228	1	On
077		135	19 Aug 03	1142	N09:10.71	W142:36.14	3	1	40	Off
077 011		137	19 Aug 03	1449	N09:22.57	W142:57.97	2	1	35	On
077 003		158	20 Aug 03	1833	N08:18.55	W146:06.18	1	1	93	On
077		162	21 Aug 03	0736	N07:30.98	W147:30.61	2	7	35	On
077		165	21 Aug 03	1200	N07:14.66	W147:58.42	4	125	3	On
077		170	23 Aug 03	1654	N11:00.39	W151:55.13	5	208	1	On
077		172	25 Aug 03	1812	N17:27.41	W155:39.39	5	208	3	On
077		180	5 Sep 03	0809	N19:27.83	W156:29.02	2	7	28	On
077		182	5 Sep 03	0905	N19:20.96	W156:25.11	3	228	28	On
077		184	5 Sep 03	1009	N19:12.80	W156:15.65	3	1	18	On
077		186	8 Sep 03	0838	N14:12.66	W146:24.59	4	98	1	Off
077 036		189	9 Sep 03	1346	N12:13.88	W142:34.27	5	230	14	On
077 036		197	10 Sep 03	1413	N10:34.82	W140:01.11	4	208	19	On
077		198	10 Sep 03	1516	N10:30.98	W139:56.40	4	208	15	On
077		211	11 Sep 03	1359	N09:19.75	W137:49.61	1	208	70	Off
077		214	11 Sep 03	1513	N09:17.90	W137:42.59	3	125	80	On
077		215	11 Sep 03	1523	N09:11.82	W137:48.24	3	1	20	Off
077		218	11 Sep 03	1750	N09:01.24	W137:30.13	5	99	4	Off
077 070		220	12 Sep 03	1221	N07:23.91	W135:01.51	5	228	20	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
077		223	13 Sep 03	0846	N05:33.26	W132:12.04	5	7	20	On
077		228	13 Sep 03	1537	N05:06.86	W131:23.53	4	7	20	On
077		230	13 Sep 03	1657	N05:00.38	W131:18.75	4	228	8	On
077		234	14 Sep 03	1131	N03:28.35	W128:59.54	4	228	1	On
077		240	16 Sep 03	1430	N00:00.30	W122:34.05	4	231	40	Off
077		241	16 Sep 03	1438	N00:04.52	W122:30.77	4	208	2	On
077		246	17 Sep 03	1845	N00:29.46	W119:45.19	4	1	21	On
077		256	20 Sep 03	1535	N03:08.86	W114:14.41	4	228	1	On
077		259	20 Sep 03	1654	N03:07.40	W114:06.30	4	1	20	On
077		263	21 Sep 03	0953	N03:29.24	W111:43.69	4	125	4	On
077		264	21 Sep 03	1011	N03:29.32	W111:40.42	5	230	15	On
077		265	22 Sep 03	0858	N03:48.93	W108:02.65	4	7	120	On
077		267	22 Sep 03	1036	N03:52.97	W107:42.29	4	208	17	On
077		268	22 Sep 03	1040	N03:51.69	W107:45.93	4	208	3	Off
077		269	22 Sep 03	1102	N03:52.05	W107:42.25	4	1	5	Off
077		275	24 Sep 03	1057	N04:38.47	W100:18.77	5	125	5	On
077		294	26 Sep 03	1435	N05:22.06	W094:22.20	4	7	65	On
077		295	26 Sep 03	1555	N05:25.90	W094:06.19	4	208	60	On
077		307	28 Sep 03	0826	N07:53.53	W089:29.50	5	1	5	On
077		311	28 Sep 03	1018	N08:08.22	W089:25.82	5	230	39	Off
077		315	28 Sep 03	1219	N08:19.29	W089:13.85	5	7	1	On
077		317	28 Sep 03	1402	N08:31.18	W089:20.60	4	208	2	On
077		324	29 Sep 03	1713	N09:20.43	W086:15.20	4	228	2	On
077		349	10 Oct 03	1021	N01:55.24	W088:37.77	4	200	5	On
077		358	11 Oct 03	0828	N00:23.86	W090:35.97	4	233	1	On
077		360	11 Oct 03	0937	N00:18.29	W090:42.07	4	200	10	On
077		365	11 Oct 03	1622	S00:25.56	W090:43.80	4	233	20	On
077		407	19 Oct 03	1458	S08:55.95	W093:46.36	4	98	12	Off
077		497	6 Nov 03	1512	S03:25.97	W080:38.41	4	73	5	On
077		514	9 Nov 03	0832	N00:52.91	W080:04.91	5	233	3	On
077		609	22 Nov 03	0731	N08:44.67	W085:45.72	3	233	2	On
077		618	22 Nov 03	1612	N08:33.55	W086:13.56	2	73	1	On
077		625	23 Nov 03	0714	N08:39.28	W087:48.77	3	233	4	Off
077		641	23 Nov 03	1414	N08:57.99	W088:21.24	2	73	2	On
077		649	24 Nov 03	0717	N09:38.33	W089:59.14	2	73	1	On
077		677	24 Nov 03	1557	N09:53.57	W091:00.06	1	126	4	On
077		746	29 Nov 03	1015	N11:01.23	W104:31.81	4	73	1	On
077		748	29 Nov 03	1104	N11:13.85	W104:31.84	4	233	10	On
077		754	30 Nov 03	1334	N13:55.15	W107:44.25	4	126	1	On
077		766	2 Dec 03	1011	N15:27.00	W112:29.64	4	224	6	On
077		771	3 Dec 03	0802	N16:30.02	W114:22.58	4	233	6	On
077		775	3 Dec 03	1608	N17:10.08	W115:32.58	4	233	5	On
077		790	7 Dec 03	1203	N26:04.03	W119:08.77	3	233	25	Off
077		797	8 Dec 03	1056	N28:44.26	W118:17.98	5	224	8	Off
077		1003	31 Jul 03	1650	N32:11.14	W117:08.04	3	199	3	On
077		1007	31 Jul 03	1917	N31:56.33	W116:57.25	2	233	70	On
077		1042	4 Aug 03	0619	N25:58.76	W113:24.01	4	224	8	On
077		1231	22 Aug 03	0726	N17:04.54	W107:25.22	3	73	1	On
077		1253	23 Aug 03	1741	N15:52.67	W111:35.80	3	233	6	On
077		1256	24 Aug 03	1232	N15:15.93	W113:57.07	4	224	4	On
077		1275	29 Aug 03	1307	N10:22.86	W122:19.79	4	126	2	On
077		1311	6 Sep 03	1428	N17:01.42	W100:48.46	3	73	1	On
077		1312	6 Sep 03	1803	N16:47.43	W100:19.38	2	73	1	On
077		1313	6 Sep 03	1831	N16:47.72	W100:10.94	2	73	5	On
077		1321	18 Sep 03	1105	N15:52.12	W098:01.67	5	99	1	Off
077		1340	23 Sep 03	0745	N13:26.54	W094:04.69	2	126	1	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
077		1383	26 Sep 03	1142	N10:54.94	W088:38.64	3	224	3	Off
077		1397	27 Sep 03	1058	N12:35.16	W088:40.67	2	73	2	On
077		1403	27 Sep 03	1436	N12:38.82	W088:29.66	1	233	2	On
077		1409	27 Sep 03	1728	N12:39.79	W088:10.08	2	224	5	On
077		1437	8 Oct 03	1624	N07:50.93	W086:30.96	5	230	1	Off
077		1440	10 Oct 03	1023	N06:01.97	W090:10.41	4	230	5	On
077 002		1442	10 Oct 03	1302	N06:05.14	W090:27.68	5	228	32	On
077		1449	11 Oct 03	1311	N06:17.20	W092:41.58	4	1	25	Off
077		1457	12 Oct 03	1516	N06:32.22	W095:30.73	4	4	2	On
077		1459	13 Oct 03	0654	N06:22.73	W096:50.68	4	1	33	On
077		1467	16 Oct 03	1656	N05:58.13	W106:47.35	4	208	1	On
077		1468	16 Oct 03	1756	N06:02.20	W106:56.92	4	1	15	On
077		1472	18 Oct 03	1557	N09:29.72	W105:00.35	4	7	1	On
077		1475	19 Oct 03	0941	N11:15.92	W103:29.05	3	7	53	Off
077		1476	19 Oct 03	1046	N11:20.15	W103:24.67	3	4	8	Off
077		1478	19 Oct 03	1345	N11:25.17	W102:59.00	1	7	70	On
077		1482	21 Oct 03	0734	N11:52.01	W098:40.61	3	1	25	On
077		1498	23 Oct 03	1247	N12:49.26	W093:10.23	3	228	35	Off
077		1499	23 Oct 03	1549	N13:02.46	W092:46.82	2	208	1	On
077		1501	23 Oct 03	1704	N13:05.87	W092:36.13	2	208	15	Off
077		1512	28 Oct 03	1500	N13:54.58	W091:47.96	2	7	1	On
077		1514	28 Oct 03	1528	N13:51.49	W091:52.87	1	228	1	Off
077		1521	28 Oct 03	1723	N13:53.01	W092:01.95	1	1	6	On
077		1522	28 Oct 03	1735	N13:52.39	W092:05.46	1	208	5	Off
077		1538	30 Oct 03	0636	N16:04.41	W094:40.07	1	208	5	Off
077		1547	30 Oct 03	1425	N15:42.28	W095:35.24	1	228	3	On
077		1555	31 Oct 03	0758	N14:43.32	W097:10.49	2	125	10	On
077		1556	31 Oct 03	0759	N14:35.77	W097:08.03	2	7	40	On
077		1561	31 Oct 03	1330	N14:42.46	W097:47.10	2	1	4	On
077		1574	2 Nov 03	1004	N14:05.06	W103:13.36	3	1	25	On
077 021		1576	2 Nov 03	1513	N13:35.90	W103:51.80	2	7	5	On
077		1598	7 Nov 03	0812	N06:00.95	W115:40.02	3	7	140	Off
077 036		1601	7 Nov 03	1058	N05:46.46	W115:58.69	3	230	17	On
077		1611	10 Nov 03	1545	N09:09.12	W117:49.29	2	4	12	Off
077		1612	10 Nov 03	1613	N09:06.02	W117:42.22	2	208	1	On
077		1618	12 Nov 03	0844	N11:26.43	W112:41.73	4	125	35	Off
077		1627	13 Nov 03	1652	N13:11.09	W109:08.18	4	230	15	On
077		1630	14 Nov 03	1104	N14:09.57	W106:56.54	3	1	5	On
077		1633	14 Nov 03	1436	N14:25.71	W106:27.60	2	208	6	Off
077		1638	15 Nov 03	1332	N15:44.27	W103:54.06	2	125	5	On
077		1645	16 Nov 03	1232	N16:57.64	W101:00.91	1	208	1	Off
077		1659	17 Nov 03	1408	N17:54.02	W102:44.79	4	208	6	On
077		1676	22 Nov 03	1808	N19:05.19	W105:33.27	5	4	2	Off
077		1679	23 Nov 03	0932	N18:38.14	W107:25.84	4	7	3	On
077		1683	23 Nov 03	1215	N18:33.05	W107:44.37	4	1	25	Off
077		1684	23 Nov 03	1659	N18:26.87	W108:22.67	4	228	6	On
077		1685	23 Nov 03	1721	N18:23.05	W108:22.80	4	208	1	On
077		1686	23 Nov 03	1755	N18:27.44	W108:33.17	4	7	1	On
077		1692	24 Nov 03	1809	N17:47.10	W111:37.44	3	208	1	On
077		1693	25 Nov 03	0734	N17:14.21	W113:28.69	2	7	1	On
077		1694	25 Nov 03	1123	N17:05.75	W113:59.91	4	208	3	On
077		1696	25 Nov 03	1154	N17:07.20	W114:05.93	4	208	1	Off
077		1698	25 Nov 03	1531	N16:59.78	W114:30.96	4	7	1	Off
077		1699	25 Nov 03	1659	N16:56.54	W114:38.38	4	208	48	On
077		1703	27 Nov 03	1053	N15:44.76	W120:08.28	5	208	2	On
077		1719	3 Dec 03	1309	N21:49.55	W111:54.33	4	125	5	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft No.	Obs No.	School Size	Ef- fort
077		1733	7 Dec 03	1637	N28:09.17	W117:47.76	2	1	12	On
077		1736	9 Dec 03	0814	N31:18.68	W117:02.30	2	1	4	On
<i>unid. small whale</i>										
078		13	30 Jul 03	1216	N30:29.33	W117:52.03	2	230	4	On
078		25	31 Jul 03	1652	N27:50.02	W121:13.33	1	230	2	On
078		30	1 Aug 03	1018	N26:17.94	W123:17.11	1	228	1	On
078		37	5 Aug 03	1210	N17:54.90	W127:29.75	5	208	2	On
078		149	20 Aug 03	1224	N08:50.35	W145:17.95	1	7	1	On
078		153	20 Aug 03	1441	N08:40.14	W145:34.44	2	1	1	On
078		161	21 Aug 03	0731	N07:34.80	W147:28.44	2	98	1	Off
078		204	11 Sep 03	1021	N09:23.41	W138:18.75	2	228	1	On
078		250	20 Sep 03	0709	N03:05.77	W115:19.93	4	230	1	On
078		281	25 Sep 03	0938	N04:42.51	W097:26.69	4	231	1	Off
078		1257	24 Aug 03	1846	N14:59.77	W114:50.84	4	73	1	On
<i>unid. large whale</i>										
079		2	29 Jul 03	1844	N32:16.10	W117:18.46	0	125	2	Off
079		39	5 Aug 03	1616	N17:18.70	W127:27.37	4	1	1	Off
079		43	6 Aug 03	1519	N14:21.19	W127:20.13	5	230	1	Off
079		193	10 Sep 03	0753	N11:04.72	W140:42.92	5	125	1	On
079		248	19 Sep 03	0805	N02:46.53	W118:06.77	5	230	1	On
079		273	23 Sep 03	1820	N04:17.27	W103:04.48	5	208	2	On
079		344	10 Oct 03	0755	N02:07.63	W088:28.81	5	126	1	On
079		347	10 Oct 03	0902	N02:04.40	W088:34.79	5	233	1	Off
079		369	12 Oct 03	0838	S01:28.85	W092:17.25	4	199	3	On
079		394	15 Oct 03	0813	S06:37.00	W100:13.44	5	73	1	On
079		437	26 Oct 03	1530	S12:23.08	W078:01.59	5	73	1	On
079		589	20 Nov 03	1513	N07:21.38	W081:58.52	4	199	1	Off
079		592	20 Nov 03	1719	N07:29.61	W082:05.06	3	224	1	On
079		1005	31 Jul 03	1719	N32:08.15	W117:01.57	2	224	1	Off
079		1032	3 Aug 03	0924	N26:44.31	W115:06.58	5	73	1	On
079		1050	5 Aug 03	1714	N24:30.98	W115:03.35	4	126	1	On
079		1280	30 Aug 03	1327	N11:25.14	W119:24.28	3	233	1	On
079		1688	24 Nov 03	0824	N17:55.55	W110:18.52	4	7	1	Off
079		1717	3 Dec 03	0747	N21:06.90	W111:40.02	5	1	1	On
<i>Kogia sp.</i>										
080		1305	6 Sep 03	1139	N17:07.87	W101:02.59	2	199	3	On
080		1642	16 Nov 03	1047	N16:52.82	W101:19.40	2	4	1	Off
<i>Mesoplodon sp. A</i>										
083		1192	15 Aug 03	1724	N20:59.16	W108:13.77	1	200	3	On
083		1237	22 Aug 03	1444	N16:50.42	W108:12.98	2	200	3	On
083		1347	23 Sep 03	1312	N13:31.08	W093:13.74	3	233	3	On
083		1577	2 Nov 03	1613	N13:30.97	W103:58.02	2	7	2	On
<i>Stenella longirostris centroamericana</i>										
088		1365	24 Sep 03	1736	N13:08.84	W090:21.62	3	126	1617	On
088		1401	27 Sep 03	1322	N12:35.35	W088:31.89	2	224	357	On
<i>Stenella attenuata</i> (unid. subsp.)										
090		578	20 Nov 03	0810	N07:18.88	W081:10.45	3	233	1	On
090		1202	16 Aug 03	1511	N19:58.39	W105:41.61	4	224	140	On
090		1203	16 Aug 03	1627	N19:51.87	W105:37.63	4	224	448	On
090 003		1215	21 Aug 03	0955	N17:39.32	W105:13.37	1	224	201	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
090		1319	18 Sep 03	0756	N16:05.19	W098:13.94	3	200	19	On
090		1393	27 Sep 03	0652	N12:39.24	W089:09.92	2	199	37	On
090 018		1414	28 Sep 03	1202	N11:43.78	W087:09.33	3	126	42	On
090 010		1487	21 Oct 03	1045	N11:43.58	W098:23.18	4	1	35	Off
090		1502	28 Oct 03	0817	N13:48.47	W090:48.33	1	125	4	On
090 018		1529	29 Oct 03	1005	N15:05.49	W093:29.22	1	208	6	On
090 006		1531	29 Oct 03	1226	N15:06.96	W093:43.12	3	230	81	On
090		1655	17 Nov 03	0943	N17:39.33	W102:15.81	2	228	47	On
090		1656	17 Nov 03	1008	N17:40.44	W102:17.35	2	7	55	On
090		1657	17 Nov 03	1020	N17:40.94	W102:20.31	4	208	127	On
090		1660	22 Nov 03	0947	N19:03.85	W104:23.34	4	231	11	Off
090		1661	22 Nov 03	1012	N19:03.78	W104:27.77	4	231	20	Off
090		1662	22 Nov 03	1020	N19:03.92	W104:28.99	2	228	5	On
090		1663	22 Nov 03	1023	N19:03.50	W104:31.92	2	1	24	On
090		1664	22 Nov 03	1052	N19:03.14	W104:33.89	2	125	9	On
090		1665	22 Nov 03	1104	N19:03.73	W104:37.61	2	125	32	On
090		1666	22 Nov 03	1105	N19:05.31	W104:37.94	2	208	5	Off
090		1667	22 Nov 03	1123	N19:04.23	W104:39.04	2	230	5	On
090		1668	22 Nov 03	1129	N19:04.32	W104:40.66	2	230	5	On
090		1669	22 Nov 03	1131	N19:05.44	W104:40.17	2	1	4	On
090		1670	22 Nov 03	1136	N19:05.51	W104:40.75	2	125	12	On
090		1671	22 Nov 03	1137	N19:05.20	W104:40.84	2	230	2	On
090		1672	22 Nov 03	1143	N19:06.37	W104:43.88	2	230	8	On
090		1673	22 Nov 03	1204	N19:08.02	W104:46.20	2	7	15	On
unid. cetacean										
096		260	21 Sep 03	0659	N03:18.01	W112:07.72	4	7	3	On
096		309	28 Sep 03	0957	N08:05.60	W089:26.99	5	230	7	On
096		523	12 Nov 03	1519	N06:15.30	W082:40.00	3	233	2	On
096		675	24 Nov 03	1503	N09:52.03	W090:51.75	1	233	2	Off
096		1093	9 Aug 03	1202	N21:41.22	W110:08.85	1	92	1	On
096		1229	21 Aug 03	1823	N17:25.99	W106:00.61	1	126	1	Off
096		1273	28 Aug 03	1957	N09:47.49	W124:18.55	4	224	1	On
096		1304	6 Sep 03	1108	N17:09.65	W101:04.13	2	200	3	On
096 002 010		1326	20 Sep 03	0732	N13:23.10	W101:25.95	2	73	133	On
096		1546	30 Oct 03	1347	N15:40.64	W095:33.77	1	208	1	Off
096		1650	16 Nov 03	1637	N17:10.31	W101:15.09	3	125	3	On
unid. whale										
098		167	21 Aug 03	1534	N06:57.15	W148:25.00	4	7	1	On
098		232	13 Sep 03	1811	N04:55.08	W131:04.85	4	125	3	On
098		411	20 Oct 03	1659	S08:34.82	W090:45.25	4	233	1	On
098		413	21 Oct 03	0702	S08:46.64	W089:15.37	4	233	1	On
098		462	3 Nov 03	0706	S09:24.79	W079:37.36	3	184	1	Off
098		1621	12 Nov 03	1525	N11:51.81	W111:51.62	4	125	1	On
<i>Balaenoptera borealis/edeni</i>										
099		48	8 Aug 03	1508	N07:53.41	W126:45.37	4	230	2	On
099		102	15 Aug 03	0948	N10:22.23	W136:53.83	2	7	1	On
099		117	17 Aug 03	0742	N04:38.16	W138:05.41	5	7	1	On
099		118	17 Aug 03	0851	N04:33.50	W138:05.33	5	125	1	On
099		252	20 Sep 03	0936	N03:01.45	W115:04.60	5	208	1	On
099		261	21 Sep 03	0732	N03:20.14	W112:01.61	4	208	3	On
099		337	9 Oct 03	1243	N03:32.99	W086:43.02	4	233	1	On
099		348	10 Oct 03	0907	N02:05.25	W088:30.18	5	73	1	Off
099		380	13 Oct 03	1014	S02:54.71	W095:15.89	3	224	2	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
099	076	427	22 Oct 03	1612	S12:28.94	W088:02.98	4	199	1	Off
		451	2 Nov 03	0819	S09:56.13	W078:49.88	4	233	1	On
		455	2 Nov 03	1350	S09:36.74	W078:32.87	2	126	1	On
		457	2 Nov 03	1807	S09:24.88	W078:44.40	3	126	1	Off
		458	3 Nov 03	0605	S09:30.02	W079:40.87	3	126	1	On
		466	3 Nov 03	1025	S09:01.36	W079:20.22	3	126	1	On
		467	3 Nov 03	1145	S09:00.73	W079:18.55	3	73	2	Off
		510	8 Nov 03	1359	N00:24.03	W080:13.69	4	73	3	On
		590	20 Nov 03	1531	N07:19.20	W081:58.92	4	84	1	Off
		701	25 Nov 03	1418	N09:06.24	W093:09.66	2	233	1	Off
		1090	9 Aug 03	1035	N21:49.85	W110:15.27	1	199	1	On
		1091	9 Aug 03	1048	N21:46.57	W110:15.58	1	126	1	On
		1098	9 Aug 03	1301	N21:39.82	W110:04.76	1	73	1	On
		1160	12 Aug 03	1932	N25:15.74	W109:07.51	4	200	2	On
		1270	28 Aug 03	1107	N10:42.63	W124:08.16	4	126	2	On
		1272	28 Aug 03	1716	N09:58.02	W124:16.11	4	73	3	On
		1445	11 Oct 03	0808	N06:11.53	W092:22.61	4	1	1	On
		1500	23 Oct 03	1649	N13:03.99	W092:38.38	2	208	2	On
		1517	28 Oct 03	1618	N13:50.94	W091:55.65	2	1	1	On
		1535	29 Oct 03	1703	N15:10.75	W094:15.70	0	7	2	On
		1606	9 Nov 03	1323	N07:26.95	W120:59.67	4	229	1	Off
		1674	22 Nov 03	1638	N19:01.67	W105:28.07	5	7	2	On
		1687	24 Nov 03	0823	N17:56.13	W110:16.18	4	228	1	On
		1704	28 Nov 03	1720	N17:49.84	W121:46.49	5	208	1	On
<i>Stenella longirostris</i> (Tres Marias)										
100		1170	13 Aug 03	1609	N23:37.98	W107:23.88	3	126	310	On
100		1172	14 Aug 03	0643	N22:13.97	W106:21.63	3	199	790	Off
100		1178	14 Aug 03	1302	N21:29.95	W106:01.93	2	233	344	On
<i>Stenella longirostris</i> (southwestern)										
101		152	20 Aug 03	1339	N08:49.56	W145:29.35	1	7	63	On
101		157	20 Aug 03	1757	N08:22.80	W146:02.98	1	208	25	On
101		191	9 Sep 03	1715	N11:55.89	W142:07.46	4	125	167	On
101		194	10 Sep 03	1022	N10:48.38	W140:25.86	5	7	97	On
101		195	10 Sep 03	1058	N10:47.40	W140:26.65	5	228	29	On
101 002		196	10 Sep 03	1253	N10:40.23	W140:11.59	5	7	257	On
101 002		213	11 Sep 03	1423	N09:19.52	W137:49.20	1	228	268	On
101 002		390	14 Oct 03	1232	S05:05.02	W097:58.41	4	73	422	On
101 002		1443	10 Oct 03	1644	N06:06.43	W090:49.44	4	228	56	On
101 002		1609	10 Nov 03	0811	N08:41.87	W118:34.98	3	208	210	On
unid. small delphinid										
177		361	11 Oct 03	1018	N00:11.94	W090:45.46	4	224	10	On
177		398	16 Oct 03	1139	S09:19.56	W103:42.71	5	224	12	On
177		469	3 Nov 03	1717	S08:35.89	W079:12.36	4	224	40	On
177		499	6 Nov 03	1631	S03:21.72	W080:30.74	4	224	20	On
177		522	12 Nov 03	1052	N05:39.88	W082:56.28	4	34	1	On
177		538	13 Nov 03	1245	N06:19.85	W080:12.08	2	126	3	On
177		539	13 Nov 03	1338	N06:29.05	W080:07.65	2	73	50	On
177		547	14 Nov 03	1105	N07:23.48	W078:27.39	3	126	4	On
177		558	19 Nov 03	1217	N08:39.78	W079:31.16	1	199	8	On
177		560	19 Nov 03	1248	N08:36.53	W079:28.72	0	233	1	On
177		571	20 Nov 03	0708	N07:10.58	W081:02.65	2	233	6	On
177		573	20 Nov 03	0712	N07:18.05	W081:03.44	2	126	1	On
177		591	20 Nov 03	1642	N07:20.81	W082:05.21	3	233	4	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
177		603	21 Nov 03	1442	N08:51.16	W084:04.21	3	233	2	On
177		608	22 Nov 03	0643	N08:46.93	W085:39.32	2	199	3	On
177		615	22 Nov 03	1403	N08:31.28	W086:11.34	3	126	4	On
177		629	23 Nov 03	0947	N08:43.35	W088:04.63	3	233	150	On
177		635	23 Nov 03	1252	N09:00.33	W088:11.03	1	224	16	On
177		637	23 Nov 03	1317	N09:02.67	W088:09.86	1	224	85	On
177		643	23 Nov 03	1423	N09:02.73	W088:19.76	2	73	10	Off
177		645	23 Nov 03	1524	N09:01.65	W088:22.15	2	224	75	Off
177		654	24 Nov 03	0939	N09:39.44	W090:23.53	0	199	2	On
177		667	24 Nov 03	1221	N09:51.92	W090:39.63	0	224	80	On
177		671	24 Nov 03	1413	N09:55.60	W090:48.55	1	233	40	On
177		672	24 Nov 03	1430	N09:49.61	W090:55.02	1	199	15	On
177		673	24 Nov 03	1430	N09:53.47	W090:54.27	1	233	6	On
177		680	24 Nov 03	1647	N09:59.26	W091:06.05	1	126	1	On
177		684	24 Nov 03	1824	N09:52.62	W091:19.15	2	73	3	Off
177		698	25 Nov 03	1325	N09:06.25	W093:07.83	2	73	12	On
177		703	25 Nov 03	1506	N09:09.29	W093:15.55	2	73	15	On
177		707	25 Nov 03	1647	N09:08.94	W093:27.06	3	126	2	On
177 002		710	26 Nov 03	0629	N08:27.45	W095:01.92	2	199	183	On
177		711	26 Nov 03	0630	N08:28.35	W095:06.09	2	224	7	On
177		733	27 Nov 03	1430	N09:12.66	W098:36.42	2	224	45	On
177 010		745	29 Nov 03	0949	N11:01.91	W104:25.80	4	126	60	On
177		749	29 Nov 03	1114	N11:11.30	W104:38.75	4	200	15	On
177		750	29 Nov 03	1141	N11:20.48	W104:35.62	4	73	30	On
177		751	29 Nov 03	1222	N11:19.58	W104:44.11	4	126	4	On
177 010		763	1 Dec 03	1740	N14:19.16	W110:37.50	4	73	40	On
177		770	2 Dec 03	1655	N15:40.44	W112:54.24	4	73	5	On
177		783	6 Dec 03	1321	N23:37.30	W119:34.29	2	233	6	On
177		787	7 Dec 03	0800	N25:36.28	W119:14.84	1	73	15	Off
177		794	7 Dec 03	1740	N26:42.67	W118:59.92	3	199	13	On
177		798	8 Dec 03	1440	N29:12.67	W118:12.40	5	84	14	Off
177		1053	7 Aug 03	0659	N23:46.48	W112:52.75	3	199	10	On
177		1058	7 Aug 03	1456	N24:03.43	W112:16.10	4	199	5	On
177		1068	8 Aug 03	1327	N22:44.95	W110:57.68	2	73	40	On
177		1069	8 Aug 03	1431	N22:38.79	W111:08.46	1	73	85	Off
177		1083	8 Aug 03	1915	N22:21.66	W111:20.58	2	73	1	On
177		1094	9 Aug 03	1212	N21:37.85	W110:07.27	1	126	4	On
177		1110	9 Aug 03	1940	N22:09.98	W109:41.83	2	199	10	On
177		1118	10 Aug 03	1228	N23:41.81	W109:02.03	3	224	4	On
177		1179	14 Aug 03	1652	N21:35.26	W106:22.18	3	126	2	On
177		1191	15 Aug 03	1528	N21:13.29	W108:09.11	2	99	2	Off
177		1214	21 Aug 03	0900	N17:43.26	W105:03.06	1	99	1	Off
177		1219	21 Aug 03	1235	N17:40.41	W105:29.44	1	73	1	On
177		1227	21 Aug 03	1709	N17:31.90	W106:00.88	0	73	10	Off
177		1233	22 Aug 03	0826	N17:06.63	W107:28.68	3	200	8	On
177		1245	23 Aug 03	1155	N16:09.85	W110:54.94	3	73	400	On
177		1247	23 Aug 03	1301	N15:59.75	W111:01.01	3	224	8	On
177		1251	23 Aug 03	1633	N15:52.96	W111:32.02	3	126	1	On
177		1296	4 Sep 03	0715	N16:05.50	W106:10.24	4	200	18	On
177		1367	25 Sep 03	1305	N11:55.45	W089:41.66	3	126	5	On
177		1372	26 Sep 03	0646	N10:17.16	W088:41.88	3	233	80	Off
177		1373	26 Sep 03	0724	N10:21.19	W088:34.80	3	73	30	On
177		1380	26 Sep 03	1048	N10:50.19	W088:32.59	3	233	2	On
177		1381	26 Sep 03	1053	N10:51.36	W088:37.50	3	200	2	On
177		1387	26 Sep 03	1632	N11:15.76	W088:39.14	1	126	11	On
177		1390	26 Sep 03	1732	N11:17.97	W088:30.14	1	126	12	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft No.	Obs No.	School Size	Ef- fort
177		1398	27 Sep 03	1127	N12:38.78	W088:38.90	2	126	9	On
177		1406	27 Sep 03	1536	N12:41.91	W088:20.92	1	126	6	Off
<i>unid. medium delphinid</i>										
277 021		334	9 Oct 03	0627	N04:07.33	W085:55.42	5	224	5	On
277		389	14 Oct 03	1206	S05:02.73	W097:54.56	4	200	7	On
277 018		417	21 Oct 03	1318	S09:12.77	W088:57.77	4	99	6	Off
277		425	22 Oct 03	1315	S12:03.77	W088:04.65	5	73	7	On
277		435	25 Oct 03	1638	S13:29.17	W081:08.31	5	73	5	On
277		460	3 Nov 03	0648	S09:30.04	W079:35.82	3	126	1	On
277		472	4 Nov 03	0852	S07:52.56	W080:12.76	4	200	1	On
277		487	5 Nov 03	1149	S05:59.81	W081:12.14	4	73	5	On
277		490	6 Nov 03	0631	S03:49.98	W081:21.88	5	233	3	On
277		665	24 Nov 03	1131	N09:46.44	W090:33.92	0	200	5	On
277		1117	10 Aug 03	1215	N23:38.57	W109:01.90	3	227	6	Off
277		1144	11 Aug 03	1545	N26:27.79	W111:00.69	2	73	19	On
277		1147	11 Aug 03	1720	N26:34.25	W111:11.54	2	199	20	On
277		1177	14 Aug 03	1100	N21:47.63	W106:06.04	3	199	10	On
277		1184	15 Aug 03	0839	N21:45.52	W107:49.80	2	73	3	Off
277		1201	16 Aug 03	1458	N19:55.34	W105:46.63	4	199	5	On
277		1209	20 Aug 03	1649	N18:19.88	W103:40.49	4	199	8	On
277		1264	26 Aug 03	1928	N13:18.48	W120:56.16	2	233	2	On
277		1334	22 Sep 03	1109	N13:27.99	W096:33.88	4	199	15	On
277		1350	24 Sep 03	0829	N13:42.93	W090:51.24	4	233	15	On
277		1354	24 Sep 03	1136	N13:32.28	W090:44.51	3	224	1	On
277		1358	24 Sep 03	1305	N13:23.55	W090:39.31	4	73	1	On
277		1369	25 Sep 03	1659	N11:23.28	W089:44.42	3	200	3	Off
277		1416	28 Sep 03	1339	N11:41.29	W086:58.46	3	200	7	On
277 018		1421	28 Sep 03	1825	N11:29.10	W086:22.79	3	199	2	On
277		1432	29 Sep 03	1334	N09:46.79	W085:37.69	4	199	1	On
277		1433	29 Sep 03	1442	N09:43.04	W085:29.38	4	199	2	Off
<i>unid. large delphinid</i>										
377		33	4 Aug 03	1704	N19:18.95	W125:48.20	5	208	2	On
377 021		160	20 Aug 03	1904	N08:16.05	W146:10.10	1	1	10	Off
377		1258	25 Aug 03	1651	N14:13.50	W117:35.96	4	73	1	On
377		1460	13 Oct 03	0707	N06:23.15	W096:51.01	4	208	1	Off
377		1591	5 Nov 03	1630	N08:49.13	W111:25.59	4	208	3	On
<i>Arctocephalus townsendi</i>										
AT		1805	3 Aug 03	1229	N26:51.13	W114:44.50	5	199	1	Off
AT		1808	7 Aug 03	1148	N23:57.36	W112:27.68	2	126	1	On
AT		1809	7 Aug 03	1221	N23:58.31	W112:21.75	2	199	4	On
AT		1810	7 Aug 03	1222	N23:59.80	W112:20.62	2	199	2	On
AT		1811	7 Aug 03	1223	N24:00.47	W112:22.38	2	224	2	On
AT		1812	7 Aug 03	1228	N23:59.68	W112:21.28	2	224	4	On
AT		1813	8 Aug 03	1536	N22:36.29	W111:13.90	1	200	1	On
AT		1814	8 Aug 03	1833	N22:27.18	W111:24.69	2	233	1	On
<i>Mirounga angustirostris</i>										
MA		901	30 Jul 03	1014	N30:38.56	W117:38.33	2	7	1	On
<i>Otaria byronia</i>										
OB		902	26 Oct 03	1518	S12:22.48	W078:05.45	5	227	1	On
OB		903	26 Oct 03	1705	S12:16.87	W077:50.33	4	98	1	Off
OB		904	31 Oct 03	1413	S11:51.47	W077:26.87	2	200	1	On

Table 2. Marine mammal sightings (continued).

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs No.	School Size	Ef- fort
OB		905	31 Oct 03	1431	S11:49.30	W077:28.49	3	73	1	On
OB		906	31 Oct 03	1443	S11:47.93	W077:30.23	3	73	1	On
OB		907	31 Oct 03	1446	S11:48.26	W077:31.06	3	224	1	On
OB		908	31 Oct 03	1450	S11:46.98	W077:31.48	3	73	3	On
OB		909	31 Oct 03	1452	S11:47.52	W077:31.47	3	200	1	On
OB		910	31 Oct 03	1511	S11:45.65	W077:34.17	3	73	1	On
OB		911	1 Nov 03	0554	S11:09.01	W078:26.15	2	73	1	On
OB		912	1 Nov 03	0832	S10:47.61	W078:13.68	3	73	1	On
OB		913	1 Nov 03	0834	S10:47.14	W078:12.93	3	73	1	On
OB		914	1 Nov 03	0855	S10:44.33	W078:10.37	2	233	1	On
OB		915	1 Nov 03	0927	S10:40.03	W078:07.17	2	34	1	On
OB		916	1 Nov 03	1420	S10:28.47	W078:18.79	2	126	1	On
OB		917	1 Nov 03	1448	S10:26.24	W078:22.71	2	34	1	On
OB		918	1 Nov 03	1503	S10:26.48	W078:24.91	3	126	1	On
OB		919	1 Nov 03	1515	S10:26.14	W078:27.27	3	199	3	On
OB		920	3 Nov 03	0933	S09:06.59	W079:25.81	4	126	1	On
OB		921	3 Nov 03	1007	S09:04.41	W079:21.17	4	73	1	Off
OB		922	4 Nov 03	1126	S07:37.21	W080:03.08	3	233	1	On
OB		923	4 Nov 03	1302	S07:28.27	W079:57.09	3	73	1	Off
OB		924	5 Nov 03	0756	S06:21.80	W081:07.74	2	73	1	Off
OB		925	5 Nov 03	0829	S06:20.57	W081:08.34	2	200	2	Off
OB		926	5 Nov 03	0851	S06:17.59	W081:10.56	2	126	1	On
OB		927	5 Nov 03	0857	S06:16.67	W081:11.03	2	126	1	On
OB		928	5 Nov 03	0858	S06:16.30	W081:10.79	2	224	1	On
OB		929	5 Nov 03	0901	S06:15.76	W081:11.23	2	224	1	On
OB		930	5 Nov 03	0903	S06:15.66	W081:12.49	2	199	3	On
OB		931	5 Nov 03	0914	S06:14.21	W081:11.97	2	126	2	Off
OB		932	5 Nov 03	1020	S06:13.71	W081:12.84	3	199	1	On
unid. pinniped										
PU		648	20 Nov 03	1043	N07:07.95	W081:28.61	2	233	1	On
PU		933	30 Jul 03	1148	N30:34.63	W117:48.24	2	208	1	On
PU		934	31 Jul 03	0933	N28:37.91	W120:13.58	1	98	1	On
PU		1817	5 Aug 03	1258	N24:42.09	W114:23.63	4	126	1	On
PU		1818	8 Aug 03	1203	N22:56.43	W110:50.04	2	224	1	On
PU		1819	8 Aug 03	1924	N22:24.50	W111:18.78	2	126	1	On
<i>Zalophus californianus</i>										
ZC		1801	1 Aug 03	1427	N29:18.39	W115:26.32	5	233	1	On
ZC		1802	1 Aug 03	1503	N29:13.35	W115:22.84	4	7	1	Off
ZC		1803	1 Aug 03	1552	N29:05.95	W115:17.96	4	200	1	On
ZC		1804	2 Aug 03	1829	N27:38.20	W115:11.84	5	73	5	On
ZC		1806	4 Aug 03	0812	N25:46.33	W113:12.82	4	200	1	On
ZC		1807	7 Aug 03	0956	N23:55.84	W112:33.03	4	73	1	On
ZC		1815	12 Aug 03	1930	N25:16.11	W109:08.09	4	200	1	On
ZC		1816	12 Aug 03	1930	N25:15.92	W109:08.12	4	73	6	On

Table 3. Summary of STAR03 marine mammal sightings. Mixed schools are counted once for each sighting category that occurs in them. School size is the mean of the best estimates of total school size for pure schools, and subgroup size of the sighting category in the case of mixed schools.

Code	Sighting Category	Pure Schools	Mixed Schools	Total Sightings	School Size
013	<i>Stenella coeruleoalba</i>	178	5	183	50.8
002	<i>Stenella attenuata</i> (offshore)	70	108	178	86.8
018	<i>Tursiops truncatus</i>	110	50	160	43.4
077	unid. dolphin	148	11	159	13.8
006	<i>Stenella attenuata graffmani</i>	87	5	92	56.6
017	<i>Delphinus delphis</i>	87	4	91	125.0
010	<i>Stenella longirostris orientalis</i>	14	66	80	114.6
177	unid. small delphinid	68	3	71	23.5
021	<i>Grampus griseus</i>	42	20	62	18.8
072	<i>Balaenoptera edeni</i>	43	4	47	1.9
015	<i>Steno bredanensis</i>	39	8	47	8.2
036	<i>Globicephala macrorhynchus</i>	28	18	46	19.3
075	<i>Balaenoptera musculus</i>	41	2	43	1.7
070	<i>Balaenoptera</i> sp.	37	4	41	1.5
011	<i>Stenella longirostris</i> (whitebelly)	9	30	39	83.6
099	<i>Balaenoptera borealis/edeni</i>	32	1	33	1.3
OB	<i>Otaria byronia</i>	31	0	31	1.3
090	<i>Stenella attenuata</i> (unid. subsp.)	23	5	28	44.9
051	<i>Mesoplodon</i> sp.	27	0	27	2.1
277	unid. medium delphinid	24	3	27	5.8
046	<i>Physeter macrocephalus</i>	23	0	23	5.1
048	<i>Kogia sima</i>	23	0	23	1.1
061	<i>Ziphius cavirostris</i>	22	0	22	1.8
016	<i>Delphinus capensis</i>	13	6	19	194.8
076	<i>Megaptera novaeangliae</i>	17	2	19	2.5
079	unid. large whale	19	0	19	1.2
037	<i>Orcinus orca</i>	13	2	15	7.0
049	ziphiid whale	14	0	14	1.8
025	<i>Lagenorhynchus obscurus</i>	4	8	12	151.0
003	<i>Stenella longirostris</i> (unid. subsp.)	6	6	12	448.6
078	unid. small whale	11	0	11	1.5
096	unid. cetacean	10	1	11	2.3
101	<i>Stenella longirostris</i> (southwestern)	5	5	10	140.2
034	<i>Globicephala</i> sp.	5	4	9	16.0
033	<i>Pseudorca crassidens</i>	7	1	8	10.2
ZC	<i>Zalophus californianus</i>	8	0	8	2.1
AT	<i>Arctocephalus townsendi</i>	8	0	8	2.0
PU	unid. pinniped	6	0	6	1.0
074	<i>Balaenoptera physalus</i>	4	2	6	2.2
098	unid. whale	6	0	6	1.3
001	<i>Mesoplodon peruvianus</i>	5	0	5	1.2
377	unid. large delphinid	4	1	5	1.8
083	<i>Mesoplodon</i> sp. A	4	0	4	2.6
005	<i>Delphinus</i> sp.	4	0	4	31.3
022	<i>Lagenorhynchus obliquidens</i>	4	0	4	13.6
100	<i>Stenella longirostris</i> (Tres Marias)	3	0	3	481.3
032	<i>Feresa attenuata</i>	1	1	2	21.7

Table 3. Summary of STAR03 marine mammal sightings (continued).

Code	Sighting Category	Pure	Mixed	Total	School
		Schools	Schools	Sightings	Size
080	<i>Kogia</i> sp.	2	0	2	2.0
088	<i>Stenella longirostris centroamericana</i>	2	0	2	986.7
063	<i>Berardius bairdii</i>	2	0	2	3.8
071	<i>Balaenoptera acutorostrata</i>	1	0	1	1.0
042	<i>Phocoena spinipinnis</i>	1	0	1	5.7
026	<i>Lagenodelphis hosei</i>	1	0	1	60.0
MA	<i>Mirounga angustirostris</i>	1	0	1	1.0
031	<i>Peponocephala electra</i>	1	0	1	73.2

Table 4. Marine mammals schools of mixed species composition during STAR03. Scientific names for each sighting code are listed in Appendix C.

Species 1 code name	Species 2 code name	Species 3 code name	Species 4 code name	Number of schools
002 OFFSH_SPOT	010 EAST_SPINR			60
011 WBEL_SPINR	002 OFFSH_SPOT			25
036 SHRT_PILOT	018 TURSIOPS			14
018 TURSIOPS	021 GRAMPUS			12
018 TURSIOPS	015 STENO			7
025 DUSKY	016 LONGB_COMM			6
101 SW_SPINNER	002 OFFSH_SPOT			5
003 UNID_SPINR	002 OFFSH_SPOT			4
036 SHRT_PILOT	077 UNID_DOLPH			3
018 TURSIOPS	002 OFFSH_SPOT			3
006 COAST_SPOT	018 TURSIOPS			3
013 STRIPED	002 OFFSH_SPOT			2
034 GLOBI_SP	018 TURSIOPS			2
018 TURSIOPS	277 UNID_M_DEL			2
017 SHRTB_COMM	013 STRIPED			2
177 UNID_S_DEL	010 EAST_SPINR			2
070 UNID_RORQL	074 FIN_WHALE			2
018 TURSIOPS	090 UNID_SPOT			2
076 HUMPBACK_W	099 SEI/BRYDES			1
034 GLOBI_SP	018 TURSIOPS	021 GRAMPUS		1
002 OFFSH_SPOT	010 EAST_SPINR	096 UNID_CETAC		1
010 EAST_SPINR	090 UNID_SPOT			1
018 TURSIOPS	077 UNID_DOLPH			1
037 KILLER_WHA	072 BRYDES_WHL			1
011 WBEL_SPINR	013 STRIPED	002 OFFSH_SPOT	077 UNID_DOLPH	1
033 FALSE_KLLR	021 GRAMPUS			1
032 PYGMY_KLLR	021 GRAMPUS			1
011 WBEL_SPINR	077 UNID_DOLPH			1
011 WBEL_SPINR	002 OFFSH_SPOT	077 UNID_DOLPH		1
377 UNID_L_DEL	021 GRAMPUS			1
070 UNID_RORQL	077 UNID_DOLPH			1
034 GLOBI_SP	021 GRAMPUS			1
021 GRAMPUS	036 SHRT_PILOT	018 TURSIOPS		1
025 DUSKY	076 HUMPBACK_W			1
018 TURSIOPS	025 DUSKY			1
006 COAST_SPOT	017 SHRTB_COMM			1
002 OFFSH_SPOT	010 EAST_SPINR	015 STENO		1
075 BLUE_WHALE	072 BRYDES_WHL	070 UNID_RORQL		1
017 SHRTB_COMM	002 OFFSH_SPOT			1
037 KILLER_WHA	018 TURSIOPS			1
075 BLUE_WHALE	072 BRYDES_WHL			1
002 OFFSH_SPOT	010 EAST_SPINR	011 WBEL_SPINR		1
003 UNID_SPINR	090 UNID_SPOT			1
090 UNID_SPOT	006 COAST_SPOT			1
002 OFFSH_SPOT	177 UNID_S_DEL			1
002 OFFSH_SPOT	011 WBEL_SPINR	072 BRYDES_WHL		1
003 UNID_SPINR	077 UNID_DOLPH			1
002 OFFSH_SPOT	077 UNID_DOLPH			1
021 GRAMPUS	077 UNID_DOLPH			1
021 GRAMPUS	277 UNID_M_DEL			1

Table 5. Effort and sighting rates during STAR03, by sea state and swell height.

	Kilometers of effort	No. of sightings	Sightings per 1000 km
Total	26200.2	1358	51.83
By sea state (Beaufort)			
0	116.7	23	197.13
1	1032.7	155	150.09
2	3104.5	341	109.84
3	3994.8	247	61.83
4	12392.5	448	36.15
5	5468.9	141	25.78
6	90.0	3	33.33
By swell height (ft)			
1	264.9	16	60.40
2	1272.0	143	112.42
3	5059.5	425	84.00
4	7409.3	395	53.31
5	5017.7	169	33.68
6	5132.1	145	28.25
7	718.0	18	25.07
8	884.9	32	36.16
9	185.2	10	54.00
10	183.4	5	27.26
12	73.2	0	0.00

Table 6. Acoustic recordings of cetaceans obtained using the towed hydrophone array on the *McArthur II* during STAR03 (including non-sighted unidentified dolphins, sperm whales, and minke whales).

Species	Leg 3	Leg 4	Leg 5	Total
Unidentified Dolphins (sighted)	5	2	11	18
Unidentified Dolphins (non-sighted)	21	14	13	48
<i>Stenella coeruleoalba</i>	14	8	26	48
<i>Stenella attenuata</i>	3	11	21	35
<i>Delphinus delphis</i>	6	6	13	25
<i>Tursiops truncatus</i>	2	12	8	22
<i>Grampus griseus</i>	2	4	3	9
<i>Globicephala</i> sp.	5	1	2	8
<i>Delphinus capensis</i>	0	3	1	4
<i>Stenella longirostris</i>	0	1	3	4
<i>Lagenorhynchus obscurus</i>	0	3	0	3
<i>Pseudorca crassidens</i>	0	0	1	1
<i>Stenella attenuata, Stenella longirostris</i>	2	1	10	13
<i>Globicephala, Tursiops truncatus</i>	2	0	3	5
<i>Lagenorhynchus obscurus, Delphinus</i> sp.	0	5	0	5
<i>Globicephala, Grampus griseus, Tursiops truncatus</i>	2	0	0	2
<i>Stenella attenuata, Delphinus</i> sp.	0	1	1	2
<i>Globicephala, Grampus griseus</i>	1	0	0	1
<i>Lagenorhynchus obscurus, Tursiops truncatus</i>	0	1	0	1
<i>Grampus griseus, Tursiops truncatus</i>	0	1	0	1
<i>Steno bredanensis, Tursiops truncatus</i>	0	0	1	1
<i>Stenella coeruleoalba, Delphinus</i> sp.	0	0	1	1
<i>Physeter macrocephalus</i> (sighted)	5	1	1	7
<i>Physeter macrocephalus</i> (non-sighted)	14	2	0	16
<i>Balaenoptera acutorostrata</i> (non-sighted)	0	0	17	17
Total	84	77	136	297

Table 7. Acoustic recordings of cetaceans obtained from the bow hydrophone on the *Jordan* during STAR03, listed in decreasing order of recordings obtained. Not all recordings contain vocalizations from the target species.

Species	Recordings
<i>Stenella attenuata, Stenella longirostris</i>	12
<i>Tursiops truncatus</i>	11
<i>Stenella attenuata</i>	11
<i>Delphinus delphis</i>	8
<i>Stenella longirostris</i>	7
<i>Steno bredanensis</i>	5
<i>Orcinus orca</i>	5
<i>Stenella attenuata, Tursiops truncatus</i>	2
<i>Pseudorca crassidens</i>	1
<i>Lagenorhynchus obliquidens</i>	1
<i>Globicephala</i> sp.	1
<i>Grampus griseus, Tursiops truncatus</i>	1
<i>Grampus griseus</i>	1
<i>Berardius bairdii</i>	1
Total	67

Table 8. Acoustic recordings of cetaceans obtained using sonobuoys on the *McArthur II* during STAR03, listed in decreasing order of recordings obtained. Not all recordings contain vocalizations from the target species.

Species	Recordings
<i>Balaenoptera musculus</i>	15
<i>Balaenoptera edeni</i>	8
<i>Balaenoptera edeni/borealis</i>	3
<i>Balaenoptera physalus</i>	3
<i>Orcinus orca</i>	2
<i>Balaenoptera borealis</i>	2
<i>Lagenodelphis hosei</i>	1
<i>Physeter macrocephalus</i>	1
<i>Globicephala</i> sp.	1
<i>Megaptera novaeangliae</i>	1
Total	37

Table 9. Acoustic recordings of cetaceans obtained using sonobuoys on the *Jordan* during STAR03, listed in decreasing order of recordings obtained. Not all recordings contain vocalizations from the target species.

Species	Recordings
<i>Balaenoptera musculus</i>	3
<i>Orcinus orca</i>	2
<i>Balaenoptera edeni/borealis</i>	1
<i>Balaenoptera edeni</i>	1
Total	7

Table 10. Cetacean schools photographed by handheld digital and 35 mm cameras and total number of images taken during STAR03, listed by number of schools photographed.

Sighting Category	Schools	Images
<i>Stenella coeruleoalba</i>	67	1056
<i>Delphinus delphis</i>	57	1338
<i>Tursiops truncatus</i>	51	612
<i>Stenella attenuata graffmani</i>	43	744
<i>Globicephala macrorhynchus</i>	32	1120
<i>Stenella attenuata</i> (offshore)	28	304
<i>Balaenoptera edeni</i>	26	467
<i>Balaenoptera musculus</i>	23	784
<i>Stenella attenuata</i> (offshore)/ <i>S. longirostris orientalis</i>	23	454
<i>Grampus griseus</i>	12	153
<i>Megaptera novaeangliae</i>	11	533
<i>Delphinus capensis</i>	10	403
<i>Stenella attenuata</i> (unid. subsp.)	10	219
<i>Steno bredanensis</i>	10	94
<i>Globicephala macrorhynchus/Tursiops truncatus</i>	9	397
<i>Orcinus orca</i>	9	565
<i>Physeter macrocephalus</i>	9	265
<i>Stenella longirostris orientalis</i>	7	73
<i>Delphinus capensis/Lagenorhynchus obscurus</i>	6	359
<i>Lagenorhynchus obscurus</i>	6	76
<i>Balaenoptera physalus</i>	5	122
<i>Balaenoptera borealis</i>	4	56
<i>Balaenoptera edeni/borealis</i>	4	30
<i>Grampus griseus/Tursiops truncatus</i>	4	132
<i>Stenella attenuata</i> (offshore)/ <i>S. longirostris</i> (whitebelly)	3	71
<i>Stenella longirostris</i> (southwestern)	3	34
<i>Pseudorca crassidens</i>	2	40
<i>Stenella attenuata</i> (offshore)/ <i>S. longirostris</i> (southwestern)	2	91
<i>S. attenuata</i> (offshore)/ <i>S. longirostris orientalis</i> / (whitebelly/southwestern)	2	154
<i>Stenella longirostris centroamericana</i>	2	138
<i>Balaenoptera musculus/B. edeni</i>	1	10
<i>Berardius bairdii</i>	1	19
<i>Feresa attenuata</i>	1	25
<i>Globicephala macrorhynchus/Tursiops truncatus/Grampus griseus</i>	1	111
<i>Lagenodelphis hosei</i>	1	61
<i>Megaptera novaeangliae/Balaenoptera edeni/borealis</i>	1	25
<i>Megaptera novaeangliae/Lagenorhynchus obscurus</i>	1	55
<i>Mesoplodon peruvianus</i>	1	53
<i>Mesoplodon</i> sp.	1	14
<i>Peponocephala electra</i>	1	17
<i>Stenella attenuata</i> (offshore)/ <i>S. longirostris</i> (whitebelly)/ <i>S. coeruleoalba</i>	1	16
<i>Stenella attenuata graffmani/Delphinus delphis</i>	1	72
<i>Stenella attenuata graffmani/S. attenuata</i> (unid. subsp.)	1	14
<i>Stenella attenuata graffmani/Tursiops truncatus</i>	1	5
<i>Stenella longirostris</i> (whitebelly)	1	24
<i>Steno bredanensis/Tursiops truncatus</i>	1	6
<i>Ziphius cavirostris</i>	1	5
Totals	497	11,416

Table 11. Digital and 35mm photographs of whales from STAR03 that are potentially identifiable as unique individuals.

Sighting No.	Date mm/dd/yy	Position	Species	Skin Sample	Photo Subject	No. of Whales Photographed	Film Roll	Digital Image Labels or Film Frames
371	10/12/03	S01:31.23	W092:23.13	<i>Balaenoptera musculus</i>	Y L dorsal	1	ABD03-14	2
414	10/21/03	S08:49.86	W089:10.70	<i>Balaenoptera musculus</i>	Y L & R dorsals	2		HOF031021-001 to 070
"	"	"	"	"	L & R dorsals	2		EAL031021-001 to 016
"	"	"	"	"	L & R dorsals	1-2	ABD03-15	18-34
416	10/21/03	S09:05.69	W089:01.64	<i>Balaenoptera musculus</i>	N R side	1	ABD03-16	1-9
420	10/22/03	S11:47.61	W088:15.95	<i>Balaenoptera musculus</i>	Y R dorsal	1		HOF031022-001 to 003
"	"	"	"	"	R dorsal	1	ABD03-16	10-15
428	10/23/03	S14:26.54	W087:25.00	<i>Balaenoptera musculus</i>	N L dorsal	1		ABD031023-001 to 016
"	"	"	"	"	R dorsals	2		MFR031023-001 to 049
"	"	"	"	"	L side	1	ABD03-17	16-36
"	"	"	"	"	L dorsal, R side	1-2	ABD03-18	1-36
433	10/25/03	S13:45.04	W081:56.74	<i>Balaenoptera musculus</i>	N R side	1		HOF031025-001 to 027
"	"	"	"	"	R side & L dorsal	1		MFR031025-001 to 018
647	11/23/03	N09:06.49	W088:28.62	<i>Balaenoptera musculus</i>	N L side	1	ABD03-34	25-34
689	11/25/03	N09:18.91	W092:52.66	<i>Balaenoptera musculus</i>	Y R dorsal	1		HOF031125-016 to 034
"	"	"	"	"	L side, fluke	1	ABD03-36	4-10
695	11/25/03	N09:08.04	W093:03.85	<i>Balaenoptera musculus</i>	N L side	1		HOF031125-045 to 053
"	"	"	"	"	R side	1		MFR031125-021 to 022
"	"	"	"	"	R side	1	ABD03-36	11-13
732	11/27/03	N09:08.84	W098:36.28	<i>Balaenoptera musculus</i>	N L side & L dorsal	1		HOF031127-001 to 011
"	"	"	"	"	L side	1	ABD03-36	26-30
1014	08/01/03	N28:46.36	W115:18.09	<i>Balaenoptera musculus</i>	N R side	1		ABD030801-005
"	"	"	"	"	L side	1		ABD030801-006
"	"	"	"	"	L side	1	ABD03-01	1-5
"	"	"	"	"	L side	1	PA003-13	1-5
1019	08/02/03	N28:23.91	W115:31.14	<i>Balaenoptera musculus</i>	N L side	1		ABD030802-001 to 002
"	"	"	"	"	L side	1	HOF03-02	1-13
1024	08/02/03	N27:50.69	W115:26.95	<i>Balaenoptera musculus</i>	N L side	1		HOF030802-001 to 003
1047	08/05/03	N24:45.53	W114:20.44	<i>Balaenoptera musculus</i>	Y L side	1	ABD03-01	11-16
1079	08/08/03	N22:29.82	W111:18.51	<i>Balaenoptera musculus</i>	Y L dorsal, R side, fluke	1	ABD03-03	10-15
1082	08/08/03	N22:24.24	W111:24.68	<i>Balaenoptera musculus</i>	Y R side	1		HOF030807-001 to 004
"	"	"	"	"	L & R dorsal	1	ABD03-03	16-36
"	"	"	"	"	L dorsal	1	HOF03-10	1-10
1087	08/09/03	N21:51.36	W110:26.36	<i>Balaenoptera musculus</i>	Y R side	1		HOF030809-061 to 097
1088	08/09/03	N21:49.13	W110:22.91	<i>Balaenoptera musculus</i>	Y R dorsal	1		HOF030809-098 to 113
"	"	"	"	"	L dorsal	1	ABD03-04	1-18
1332	09/21/03	N13:11.75	W099:04.32	<i>Balaenoptera musculus</i>	Y R side	1	ABD03-08	29-34
"	"	"	"	"	L side	1	ABD03-09	1-2
1727	12/06/03	N25:22.52	W116:08.08	<i>Balaenoptera musculus</i>	N L dorsal	1		DEG031206-001 to 027
"	"	"	"	"	R dorsal	1		EME031206-001 to 022

Table 11. Digital and 35mm photographs of whales from STAR (continued).

Sighting No.	Date mm/dd/yy	Position	Species	Skin Sample	Photo Subject	No. of Whales Photographed	Film Roll	Digital Image Labels or Film Frames
1735	12/08/03	N29:20.66	W118:07.63	<i>Balaenoptera musculus</i>	Y L & R dorsal	1		DEG031208-001 to 091
443	11/01/03	S10:54.48	W078:19.31	<i>Megaptera novaeangliae</i>	N L dorsal	1		ABD031101-001 to 003
"	"	"	"	"	L dorsals	2		MFR031101-001 to 006
445	11/01/03	S10:28.15	W078:08.42	<i>Megaptera novaeangliae</i>	N 1 fluke, 2 R dorsals	2		ABD032202-007 to 015
"	"	"	"	"	L & R dorsals	2		MFR031101-013 to 058
447	11/01/03	S10:26.95	W078:32.11	<i>Megaptera novaeangliae</i>	N fluke, R dorsal	1		ABD031101-021 to 026
"	"	"	"	"	R dorsal	1		MFR031101-093 to 096
478	11/04/03	S07:28.82	W079:57.61	<i>Megaptera novaeangliae</i>	Y L & R dorsals, fluke tip	2		HOF031104-022 to 051
"	"	"	"	"	fluke, R dorsal	1	ABD03-24	16-24
483	11/05/03	S06:24.75	W081:10.62	<i>Megaptera novaeangliae</i>	N flukes & dorsals	8		ABD031105-001 to 042
"	"	"	"	"	flukes & dorsals	8		MFR031105-062 to 100
484	11/05/03	S06:24.51	W081:10.38	<i>Megaptera novaeangliae</i>	N L & R dorsals, fluke tips	2		ABD031105-043 to 077
"	"	"	"	"	L & R dorsals, fluke tips	2		MFR031105-101 to 143
485	11/05/03	S06:22.21	W081:07.38	<i>Megaptera novaeangliae</i>	N L & R dorsals, fluke tip	2		HOF031105-001 to 039
"	"	"	"	"	L dorsal, fluke tip	1-2	ABD03-25	14-24
486	11/05/03	S06:13.95	W081:10.89	<i>Megaptera novaeangliae</i>	N flukes, L & R dorsals	4		HOF031105-040 to 123
"	"	"	"	"	flukes, L & R dorsals	4		MFR031105-144 to 150
"	"	"	"	"	flukes, L dorsals	2-4	ABD03-25	25-36
"	"	"	"	"	flukes, L & R dorsals	2-4	ABD03-26	1-16
488	11/05/03	S05:41.60	W081:17.38	<i>Megaptera novaeangliae</i>	N L & R dorsals	2		HOF031105-124 to 160
"	"	"	"	"	L & R dorsals	2	ABD03-26	17-29
492	11/06/03	S03:43.39	W081:17.66	<i>Megaptera novaeangliae</i>	N fluke, R dorsal	1		HOF031106-001 to 047
"	"	"	"	"	R dorsal	1	ABD03-27	3-19
509	11/08/03	N00:09.98	W080:18.32	<i>Megaptera novaeangliae</i>	N L dorsals	2		HOF031108-024 to 033
"	"	"	"	"	L dorsal	1	ABD03-28	1-2
510	11/08/03	N00:24.03	W080:13.69	<i>Megaptera novaeangliae</i>	N L dorsals	2		HOF031108-034 to 058
"	"	"	"	"	L dorsals	2	ABD03-28	3-16
543	11/13/03	N06:28.84	W079:33.76	<i>Orcinus orca</i>	N L dorsal	1		HOF031113-072
1056	08/07/03	N23:58.67	W112:18.35	<i>Orcinus orca</i>	Y L & R dorsals	17		HOF030807-001 to 070
"	"	"	"	"	L & R dorsals	8	ABD03-01	18-36
"	"	"	"	"	L & R dorsals	8	ABD03-02	1-27
1085	08/09/03	N21:47.44	W110:19.44	<i>Orcinus orca</i>	Y L & R dorsals	15		HOF030809-001 to 060
1181	08/14/03	N21:43.97	W106:33.74	<i>Orcinus orca</i>	Y L & R dorsals	6-7		ABD030814-001 to 014
1382	09/26/03	N10:56.17	W088:39.28	<i>Orcinus orca</i>	Y L & R dorsals	20-25		HOF030926-021 to 185
"	"	"	"	"	L & R dorsals	5	ABD03-10	12-31
1447	10/11/03	N06:12.38	W092:41.37	<i>Orcinus orca</i>	N R dorsal	1		DEG031011-006
1617	11/12/03	N11:25.13	W112:42.52	<i>Orcinus orca</i>	N L & R dorsals	2		CES031112-001 to 012
"	"	"	"	"	L & R dorsals	2		DEG031112-009 to 015
32	08/01/03	N25:48.39	W123:47.79	<i>Physeter macrocephalus</i>	N fluke	1		CSO030801-012 to 013
72	08/12/03	N12:55.96	W133:33.29	<i>Physeter macrocephalus</i>	N L & R dorsals	3		DEG030812-001 to 022

Table 11. Digital and 35mm photographs of whales from STAR03 (continued).

Sighting No.	Date mm/dd/yy	Position	Species	Skin Sample	Photo Subject	No. of Whales Photographed	Film Roll	Digital Image Labels or Film Frames
"	"	"	"	"	L & R dorsal	1	DEG03-01	22-31
174	08/26/03	N19:24.79	W156:52.66	<i>Physeter macrocephalus</i>	N L & R dorsals	3		CSO030826-001 to 018
328	10/07/03	N07:33.88	W084:50.21	<i>Physeter macrocephalus</i>	N L & R dorsals	4-6		HOF031007-009 to 086
386	10/14/03	S04:52.61	W097:42.91	<i>Physeter macrocephalus</i>	Y L dorsals	2		HOF031014-001 to 014
388	10/14/03	S05:02.57	W097:52.03	<i>Physeter macrocephalus</i>	N R dorsal	1		HOF031014-015 to 029
410	10/20/03	S08:32.48	W090:53.43	<i>Physeter macrocephalus</i>	N fluke	1		HOF031020-064 to 066
785	12/06/03	N23:50.68	W119:31.75	<i>Physeter macrocephalus</i>	Y fluke & R dorsal	1		ABD031206-021 to 026
1610	11/10/03	N08:47.52	W118:23.59	<i>Physeter macrocephalus</i>	N fluke	1		DEG031110-014 to 015

Table 12. Aerial photogrammetry effort, total number of schools, and number of calibration schools, obtained per leg during STAR03 by the helicopter on the *Jordan*.

Leg #	1	2	3	4	5	6	Totals
Days Flown	11	7	4	3	10	9	44
Days Lost	5	11	9	14	11	9	59
% Days Flown	69%	39%	31%	18%	48%	50%	43%
Flight Hours	28.6	19.7	16.4	15.2	24.7	22.3	126.9
Avg. Flight Hrs./Days Flown	2.60	2.81	4.10	5.07	2.47	2.48	2.88
Number of Schools Photographed	43	24	15	12	13	15	122
Number of Schools for Calibration	10	7	4	3	8	5	37
% Calibration	23%	29%	27%	25%	62%	33%	30%

Table 13. Numbers of aerially photographed cetacean schools per leg during STAR03 by the helicopter on the *Jordan*.

Leg #	1	2	3	4	5	6	Totals
<i>Stenella attenuata</i>	5	7	4	0	3	1	20
<i>Stenella longirostris</i>	2	0	1	1	0	0	4
Mixed <i>S. attenuata</i> & <i>S. longirostris</i>	4	2	0	3	2	0	11
<i>Stenella coeruleoalba</i>	4	6	4	0	1	4	19
<i>Delphinus</i> sp.	3	1	0	0	3	6	13
Other Small Cetaceans	7	6	5	6	3	4	31
Unid. Small Cetaceans	3	1	0	0	0	0	4
<i>Balaenoptera physalus</i>	2	0	0	0	0	0	2
<i>Balaenoptera musculus</i>	4	0	1	0	0	0	5
<i>Balaenoptera edeni</i>	8	0	0	0	0	0	8
Beaked Whales	1	1	0	2	1	0	5
Totals	43	24	15	12	13	15	122

Table 14. Identity and location of cetacean skin biopsy samples obtained during STAR03.

Species/Stock	Sighting Number	Date	Ship	Position
<i>Balaenoptera edeni</i>	1067	8/08/2003	DSJ	22°48'N 111° 0'W
<i>Balaenoptera edeni</i>	1445	10/11/2003	DSJ	6°12'N 92°22'W
<i>Balaenoptera edeni</i>	1486	10/21/2003	DSJ	11°46'N 98°30'W
<i>Balaenoptera edeni</i>	1161	8/13/2003	DSJ	24°22'N 107°36'W
<i>Balaenoptera edeni</i>	1038	8/03/2003	DSJ	26°55'N 114°31'W
<i>Balaenoptera edeni</i>	1362	9/24/2003	DSJ	13° 8'N 90°26'W
<i>Balaenoptera edeni</i>	1700	11/26/2003	DSJ	16°32'N 116°48'W
<i>Balaenoptera edeni</i>	1067	8/08/2003	DSJ	22°48'N 111° 0'W
<i>Balaenoptera edeni</i>	1169	8/13/2003	DSJ	23°46'N 107°37'W
<i>Balaenoptera edeni</i>	1085	8/09/2003	DSJ	21°49'N 110°26'W
<i>Balaenoptera edeni</i>	1034	8/03/2003	DSJ	26°53'N 114°41'W
<i>Balaenoptera musculus</i>	1079	8/08/2003	DSJ	22°33'N 111°15'W
<i>Balaenoptera musculus</i>	1088	8/09/2003	DSJ	21°49'N 110°23'W
<i>Balaenoptera musculus</i>	1082	8/08/2003	DSJ	22°27'N 111°24'W
<i>Balaenoptera musculus</i>	1082	8/08/2003	DSJ	22°27'N 111°24'W
<i>Balaenoptera musculus</i>	1087	8/09/2003	DSJ	21°49'N 110°24'W
<i>Balaenoptera musculus</i>	1735	12/08/2003	DSJ	29°21'N 118° 8'W
<i>Balaenoptera musculus</i>	1047	8/05/2003	DSJ	24°45'N 114°19'W
<i>Balaenoptera musculus</i>	1332	9/21/2003	DSJ	13°10'N 99° 3'W
<i>Balaenoptera musculus</i>	1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Balaenoptera musculus</i>	1722	12/03/2003	DSJ	22° 7'N 112°26'W
<i>Balaenoptera musculus</i>	371	10/12/2003	MAC	1°33'S 92°25'W
<i>Balaenoptera musculus</i>	414	10/21/2003	MAC	9°19'S 89° 4'W
<i>Balaenoptera musculus</i>	414	10/21/2003	MAC	9°19'S 89° 4'W
<i>Balaenoptera musculus</i>	420	10/22/2003	MAC	11°50'S 88°13'W
<i>Balaenoptera musculus</i>	668	11/24/2003	MAC	9°49'N 90°41'W
<i>Balaenoptera musculus</i>	689	11/25/2003	MAC	9°18'N 92°50'W
<i>Balaenoptera physalus</i>	431	10/24/2003	MAC	14°48'S 84°46'W
<i>Berardius bairdii</i>	1057	8/07/2003	DSJ	24° 3'N 112°21'W
<i>Delphinus capensis</i>	1156	8/12/2003	DSJ	24°34'N 109°24'W
<i>Delphinus capensis</i>	1006	7/31/2003	DSJ	32° 0'N 116°57'W
<i>Delphinus capensis</i>	1006	7/31/2003	DSJ	32° 0'N 116°57'W
<i>Delphinus capensis</i>	1043	8/04/2003	DSJ	25°45'N 113°12'W
<i>Delphinus capensis</i>	1004	7/31/2003	DSJ	32° 8'N 117° 3'W
<i>Delphinus capensis</i>	1156	8/12/2003	DSJ	24°34'N 109°24'W
<i>Delphinus capensis</i>	1044	8/04/2003	DSJ	24°49'N 112°19'W
<i>Delphinus capensis</i>	1006	7/31/2003	DSJ	32° 0'N 116°57'W
<i>Delphinus capensis</i>	1044	8/04/2003	DSJ	24°49'N 112°19'W
<i>Delphinus capensis</i>	1044	8/04/2003	DSJ	24°49'N 112°19'W
<i>Delphinus capensis</i>	1156	8/12/2003	DSJ	24°34'N 109°24'W
<i>Delphinus capensis</i>	1156	8/12/2003	DSJ	24°34'N 109°24'W
<i>Delphinus capensis</i>	1156	8/12/2003	DSJ	24°34'N 109°24'W
<i>Delphinus capensis</i>	1004	7/31/2003	DSJ	32° 8'N 117° 3'W
<i>Delphinus capensis</i>	1004	7/31/2003	DSJ	32° 8'N 117° 3'W
<i>Delphinus capensis</i>	1046	8/04/2003	DSJ	24°49'N 112°31'W
<i>Delphinus capensis</i>	1046	8/04/2003	DSJ	24°49'N 112°31'W
<i>Delphinus capensis</i>	1046	8/04/2003	DSJ	24°49'N 112°31'W
<i>Delphinus capensis</i>	1046	8/04/2003	DSJ	24°49'N 112°31'W
<i>Delphinus capensis</i>	1156	8/12/2003	DSJ	24°34'N 109°24'W
<i>Delphinus capensis</i>	1059	8/07/2003	DSJ	24° 9'N 111°54'W
<i>Delphinus capensis</i>	1044	8/04/2003	DSJ	24°49'N 112°19'W
<i>Delphinus capensis</i>	1156	8/12/2003	DSJ	24°34'N 109°24'W
<i>Delphinus capensis</i>	1044	8/04/2003	DSJ	24°49'N 112°19'W
<i>Delphinus capensis</i>	1043	8/04/2003	DSJ	25°45'N 113°12'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock	Sighting Number	Date	Ship	Position	
<i>Delphinus capensis</i>	1043	8/04/2003	DSJ	25°45'N	113° 12'W
<i>Delphinus capensis</i>	1046	8/04/2003	DSJ	24°49'N	112° 31'W
<i>Delphinus capensis</i>	454	11/02/2003	MAC	9°44'S	78° 34'W
<i>Delphinus capensis</i>	454	11/02/2003	MAC	9°44'S	78° 34'W
<i>Delphinus capensis</i>	454	11/02/2003	MAC	9°44'S	78° 34'W
<i>Delphinus capensis</i>	456	11/02/2003	MAC	9°25'S	78° 43'W
<i>Delphinus capensis</i>	456	11/02/2003	MAC	9°25'S	78° 43'W
<i>Delphinus delphis</i>	1549	10/30/2003	DSJ	15°38'N	95° 48'W
<i>Delphinus delphis</i>	1544	10/30/2003	DSJ	15°42'N	95° 26'W
<i>Delphinus delphis</i>	1548	10/30/2003	DSJ	15°39'N	95° 39'W
<i>Delphinus delphis</i>	1544	10/30/2003	DSJ	15°42'N	95° 26'W
<i>Delphinus delphis</i>	1374	9/26/2003	DSJ	10°24'N	88° 36'W
<i>Delphinus delphis</i>	1549	10/30/2003	DSJ	15°38'N	95° 48'W
<i>Delphinus delphis</i>	1055	8/07/2003	DSJ	23°57'N	112° 30'W
<i>Delphinus delphis</i>	1544	10/30/2003	DSJ	15°42'N	95° 26'W
<i>Delphinus delphis</i>	541	11/13/2003	MAC	6°22'N	79° 43'W
<i>Delphinus delphis</i>	620	11/22/2003	MAC	8°28'N	86° 18'W
<i>Delphinus sp.</i>	1004	7/31/2003	DSJ	32° 8'N	117° 3'W
<i>Globicephala macrorhynchus</i>	1724	12/05/2003	DSJ	22°48'N	116° 37'W
<i>Globicephala macrorhynchus</i>	1724	12/05/2003	DSJ	22°48'N	116° 37'W
<i>Globicephala macrorhynchus</i>	1031	8/02/2003	DSJ	27°37'N	115° 10'W
<i>Globicephala macrorhynchus</i>	1724	12/05/2003	DSJ	22°48'N	116° 37'W
<i>Globicephala macrorhynchus</i>	1031	8/02/2003	DSJ	27°37'N	115° 10'W
<i>Globicephala macrorhynchus</i>	1725	12/05/2003	DSJ	23° 1'N	116° 30'W
<i>Globicephala macrorhynchus</i>	291	9/26/2003	MAC	5°10'N	94° 40'W
<i>Globicephala macrorhynchus</i>	292	9/26/2003	MAC	5°11'N	94° 36'W
<i>Globicephala macrorhynchus</i>	292	9/26/2003	MAC	5°11'N	94° 36'W
<i>Globicephala macrorhynchus</i>	292	9/26/2003	MAC	5°11'N	94° 36'W
<i>Globicephala macrorhynchus</i>	292	9/26/2003	MAC	5°11'N	94° 36'W
<i>Globicephala macrorhynchus</i>	292	9/26/2003	MAC	5°11'N	94° 36'W
<i>Globicephala macrorhynchus</i>	302	9/27/2003	MAC	6°44'N	91° 17'W
<i>Globicephala macrorhynchus</i>	353	10/10/2003	MAC	1°33'N	89° 18'W
<i>Globicephala macrorhynchus</i>	408	10/19/2003	MAC	8°52'S	93° 18'W
<i>Globicephala macrorhynchus</i>	408	10/19/2003	MAC	8°52'S	93° 18'W
<i>Globicephala macrorhynchus</i>	408	10/19/2003	MAC	8°52'S	93° 18'W
<i>Globicephala macrorhynchus</i>	409	10/20/2003	MAC	8°31'S	91° 16'W
<i>Globicephala macrorhynchus</i>	409	10/20/2003	MAC	8°31'S	91° 16'W
<i>Globicephala macrorhynchus</i>	409	10/20/2003	MAC	8°31'S	91° 16'W
<i>Globicephala macrorhynchus</i>	409	10/20/2003	MAC	8°31'S	91° 16'W
<i>Globicephala macrorhynchus</i>	409	10/20/2003	MAC	8°31'S	91° 16'W
<i>Globicephala macrorhynchus</i>	409	10/20/2003	MAC	8°31'S	91° 16'W
<i>Globicephala macrorhynchus</i>	409	10/20/2003	MAC	8°31'S	91° 16'W
<i>Globicephala macrorhynchus</i>	409	10/20/2003	MAC	8°31'S	91° 16'W
<i>Globicephala macrorhynchus</i>	423	10/22/2003	MAC	11°57'S	88° 11'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	430	10/24/2003	MAC	14°44'S	84° 47'W
<i>Globicephala macrorhynchus</i>	612	11/22/2003	MAC	8°34'N	85° 55'W
<i>Globicephala macrorhynchus</i>	612	11/22/2003	MAC	8°34'N	85° 55'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock		Sighting Number	Date	Ship	Position
<i>Globicephala macrorhynchus</i>		612	11/22/2003	MAC	8°34'N 85°55'W
<i>Globicephala macrorhynchus</i>		612	11/22/2003	MAC	8°34'N 85°55'W
<i>Globicephala macrorhynchus</i>		612	11/22/2003	MAC	8°34'N 85°55'W
<i>Globicephala macrorhynchus</i>		612	11/22/2003	MAC	8°34'N 85°55'W
<i>Globicephala macrorhynchus</i>		612	11/22/2003	MAC	8°34'N 85°55'W
<i>Globicephala macrorhynchus</i>		612	11/22/2003	MAC	8°34'N 85°55'W
<i>Globicephala macrorhynchus</i>		612	11/22/2003	MAC	8°34'N 85°55'W
<i>Globicephala macrorhynchus</i>		612	11/22/2003	MAC	8°34'N 85°55'W
<i>Globicephala macrorhynchus</i>		612	11/22/2003	MAC	8°34'N 85°55'W
<i>Globicephala macrorhynchus</i>		786	12/07/2003	MAC	25°35'N 119°16'W
<i>Globicephala macrorhynchus</i>		786	12/07/2003	MAC	25°35'N 119°16'W
<i>Globicephala macrorhynchus</i>		302	9/27/2003	MAC	6°44'N 91°17'W
<i>Grampus griseus</i>		1124	8/10/2003	DSJ	24°11'N 109°22'W
<i>Grampus griseus</i>		1137	8/11/2003	DSJ	26°13'N 119°49'W
<i>Grampus griseus</i>		1137	8/11/2003	DSJ	26°13'N 119°49'W
<i>Grampus griseus</i>		1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Grampus griseus</i>		1551	10/30/2003	DSJ	15°35'N 95°53'W
<i>Grampus griseus</i>		1309	9/06/2003	DSJ	17° 6'N 100°58'W
<i>Grampus griseus</i>		1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Grampus griseus</i>		1566	11/01/2003	DSJ	15°16'N 100°48'W
<i>Grampus griseus</i>		1534	10/29/2003	DSJ	15°11'N 94°13'W
<i>Grampus griseus</i>		1309	9/06/2003	DSJ	17° 6'N 100°58'W
<i>Grampus griseus</i>		1534	10/29/2003	DSJ	15°11'N 94°13'W
<i>Grampus griseus</i>		1566	11/01/2003	DSJ	15°16'N 100°48'W
<i>Grampus griseus</i>		1534	10/29/2003	DSJ	15°11'N 94°13'W
<i>Grampus griseus</i>		1566	11/01/2003	DSJ	15°16'N 100°48'W
<i>Grampus griseus</i>		1534	10/29/2003	DSJ	15°11'N 94°13'W
<i>Grampus griseus</i>		1534	10/29/2003	DSJ	15°11'N 94°13'W
<i>Grampus griseus</i>		1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Grampus griseus</i>		1534	10/29/2003	DSJ	15°11'N 94°13'W
<i>Lagenorhynchus obscurus</i>		444	11/01/2003	MAC	10°35'S 78° 7'W
<i>Lagenorhynchus obscurus</i>		454	11/02/2003	MAC	9°44'S 78°34'W
<i>Lagenorhynchus obscurus</i>		454	11/02/2003	MAC	9°44'S 78°34'W
<i>Lagenorhynchus obscurus</i>		454	11/02/2003	MAC	9°44'S 78°34'W
<i>Lagenorhynchus obliquidens</i>		1010	8/01/2003	DSJ	29°49'N 115°49'W
<i>Lagenorhynchus obliquidens</i>		1010	8/01/2003	DSJ	29°49'N 115°49'W
<i>Megaptera novaeangliae</i>		477	11/04/2003	MAC	7°32'S 79°57'W
<i>Megaptera novaeangliae</i>		478	11/04/2003	MAC	7°32'S 79°56'W
<i>Mesoplodon peruvianus</i>		616	11/22/2003	MAC	8°30'N 86°11'W
<i>Orcinus orca</i>		1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>		1085	8/09/2003	DSJ	21°49'N 110°26'W
<i>Orcinus orca</i>		1056	8/07/2003	DSJ	23°59'N 112°18'W
<i>Orcinus orca</i>		1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>		1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>		1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>		1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>		1181	8/14/2003	DSJ	21°46'N 106°32'W
<i>Orcinus orca</i>		1056	8/07/2003	DSJ	23°59'N 112°18'W
<i>Orcinus orca</i>		1085	8/09/2003	DSJ	21°49'N 110°26'W
<i>Orcinus orca</i>		1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>		1085	8/09/2003	DSJ	21°49'N 110°26'W
<i>Orcinus orca</i>		1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>		1181	8/14/2003	DSJ	21°46'N 106°32'W
<i>Orcinus orca</i>		1181	8/14/2003	DSJ	21°46'N 106°32'W
<i>Orcinus orca</i>		1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>		1382	9/26/2003	DSJ	10°57'N 88°39'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock	Sighting Number	Date	Ship	Position
<i>Orcinus orca</i>	1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>	1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>	1085	8/09/2003	DSJ	21°49'N 110°26'W
<i>Orcinus orca</i>	1382	9/26/2003	DSJ	10°57'N 88°39'W
<i>Orcinus orca</i>	1085	8/09/2003	DSJ	21°49'N 110°26'W
<i>Orcinus orca</i>	1085	8/09/2003	DSJ	21°49'N 110°26'W
<i>Orcinus orca</i>	1056	8/07/2003	DSJ	23°59'N 112°18'W
<i>Orcinus orca</i>	1056	8/07/2003	DSJ	23°59'N 112°18'W
<i>Orcinus orca</i>	1056	8/07/2003	DSJ	23°59'N 112°18'W
<i>Orcinus orca</i>	202	9/11/2003	MAC	9°27'N 138°24'W
<i>Orcinus orca</i>	202	9/11/2003	MAC	9°27'N 138°24'W
<i>Orcinus orca</i>	543	11/13/2003	MAC	6°29'N 79°35'W
<i>Physeter macrocephalus</i>	386	10/14/2003	MAC	4°58'S 97°41'W
<i>Physeter macrocephalus</i>	386	10/14/2003	MAC	4°58'S 97°41'W
<i>Physeter macrocephalus</i>	785	12/06/2003	MAC	23°45'N 119°30'W
<i>Physeter macrocephalus</i>	785	12/06/2003	MAC	23°45'N 119°30'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Pseudorca crassidens</i>	1213	8/21/2003	DSJ	17°45'N 104°56'W
<i>Stenella attenuata</i>	1494	10/23/2003	DSJ	12°31'N 93°47'W
<i>Stenella attenuata</i>	1187	8/15/2003	DSJ	21°45'N 108° 0'W
<i>Stenella attenuata</i>	1187	8/15/2003	DSJ	21°45'N 108° 0'W
<i>Stenella attenuata</i>	1187	8/15/2003	DSJ	21°45'N 108° 0'W
<i>Stenella attenuata</i>	1571	11/01/2003	DSJ	15°11'N 101° 6'W
<i>Stenella attenuata</i>	1571	11/01/2003	DSJ	15°11'N 101° 6'W
<i>Stenella attenuata</i>	1187	8/15/2003	DSJ	21°45'N 108° 0'W
<i>Stenella attenuata</i>	1189	8/15/2003	DSJ	21°16'N 108° 6'W
<i>Stenella attenuata</i>	1190	8/15/2003	DSJ	21°12'N 108° 9'W
<i>Stenella attenuata</i>	1200	8/16/2003	DSJ	20° 7'N 106° 9'W
<i>Stenella attenuata</i>	1203	8/16/2003	DSJ	19°52'N 105°37'W
<i>Stenella attenuata</i>	1557	10/31/2003	DSJ	14°30'N 97°17'W
<i>Stenella attenuata</i>	1557	10/31/2003	DSJ	14°30'N 97°17'W
<i>Stenella attenuata</i>	1557	10/31/2003	DSJ	14°30'N 97°17'W
<i>Stenella attenuata</i>	1168	8/13/2003	DSJ	25°59'N 107°45'W
<i>Stenella attenuata</i>	1329	9/20/2003	DSJ	12°55'N 101°18'W
<i>Stenella attenuata</i>	1494	10/23/2003	DSJ	12°31'N 93°47'W
<i>Stenella attenuata</i>	1494	10/23/2003	DSJ	12°31'N 93°47'W
<i>Stenella attenuata</i>	1492	10/22/2003	DSJ	11°54'N 95°21'W
<i>Stenella attenuata</i>	1492	10/22/2003	DSJ	11°54'N 95°21'W
<i>Stenella attenuata</i>	1492	10/22/2003	DSJ	11°54'N 95°21'W
<i>Stenella attenuata</i>	1203	8/16/2003	DSJ	19°52'N 105°37'W
<i>Stenella attenuata</i>	1329	9/20/2003	DSJ	12°55'N 101°18'W
<i>Stenella attenuata</i>	1203	8/16/2003	DSJ	19°52'N 105°37'W
<i>Stenella attenuata</i>	1329	9/20/2003	DSJ	12°55'N 101°18'W
<i>Stenella attenuata</i>	1326	9/20/2003	DSJ	13°23'N 101°26'W
<i>Stenella attenuata</i>	1300	9/05/2003	DSJ	17°16'N 102°46'W
<i>Stenella attenuata</i>	1278	8/30/2003	DSJ	11°14'N 119°45'W
<i>Stenella attenuata</i>	1238	8/22/2003	DSJ	16°51'N 108°25'W
<i>Stenella attenuata</i>	1203	8/16/2003	DSJ	19°52'N 105°37'W
<i>Stenella attenuata</i>	1489	10/21/2003	DSJ	11°40'N 93° 4'W
<i>Stenella attenuata</i>	1119	8/10/2003	DSJ	23°45'N 109° 5'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock	Sighting Number	Date	Ship	Position
<i>Stenella attenuata</i>	1119	8/10/2003	DSJ	23°45'N 109° 5'W
<i>Stenella attenuata</i>	1114	8/10/2003	DSJ	23°18'N 108°50'W
<i>Stenella attenuata</i>	1106	8/09/2003	DSJ	21°55'N 109°49'W
<i>Stenella attenuata</i>	1106	8/09/2003	DSJ	21°55'N 109°49'W
<i>Stenella attenuata</i>	1203	8/16/2003	DSJ	19°52'N 105°37'W
<i>Stenella attenuata</i>	1168	8/13/2003	DSJ	25°59'N 107°45'W
<i>Stenella attenuata</i>	1106	8/09/2003	DSJ	21°55'N 109°49'W
<i>Stenella attenuata</i>	1106	8/09/2003	DSJ	21°55'N 109°49'W
<i>Stenella attenuata</i>	1106	8/09/2003	DSJ	21°55'N 109°49'W
<i>Stenella attenuata</i>	1119	8/10/2003	DSJ	23°45'N 109° 5'W
<i>Stenella attenuata</i>	1158	8/12/2003	DSJ	25°31'N 109°26'W
<i>Stenella attenuata</i>	1158	8/12/2003	DSJ	25°31'N 109°26'W
<i>Stenella attenuata</i>	1158	8/12/2003	DSJ	25°31'N 109°26'W
<i>Stenella attenuata</i>	1106	8/09/2003	DSJ	21°55'N 109°49'W
<i>Stenella attenuata</i>	1166	8/13/2003	DSJ	24° 9'N 107°55'W
<i>Stenella attenuata</i>	1168	8/13/2003	DSJ	25°59'N 107°45'W
<i>Stenella attenuata</i>	1106	8/09/2003	DSJ	21°55'N 109°49'W
<i>Stenella attenuata</i>	1158	8/12/2003	DSJ	25°31'N 109°26'W
<i>Stenella attenuata</i>	1634	11/14/2003	DSJ	14°35'N 106°11'W
<i>Stenella attenuata</i>	1166	8/13/2003	DSJ	24° 9'N 107°55'W
<i>Stenella attenuata</i>	1654	11/17/2003	DSJ	17°41'N 102°13'W
<i>Stenella attenuata</i>	1634	11/14/2003	DSJ	14°35'N 106°11'W
<i>Stenella attenuata</i>	1654	11/17/2003	DSJ	17°41'N 102°13'W
<i>Stenella attenuata</i>	1634	11/14/2003	DSJ	14°35'N 106°11'W
<i>Stenella attenuata</i>	1654	11/17/2003	DSJ	17°41'N 102°13'W
<i>Stenella attenuata</i>	1634	11/14/2003	DSJ	14°35'N 106°11'W
<i>Stenella attenuata</i>	1654	11/17/2003	DSJ	17°41'N 102°13'W
<i>Stenella attenuata</i>	1654	11/17/2003	DSJ	17°41'N 102°13'W
<i>Stenella attenuata</i>	1165	8/13/2003	DSJ	24°11'N 108° 1'W
<i>Stenella attenuata</i>	1158	8/12/2003	DSJ	25°31'N 109°26'W
<i>Stenella attenuata</i>	1634	11/14/2003	DSJ	14°35'N 106°11'W
<i>Stenella attenuata</i>	758	12/01/2003	MAC	14°38'N 109°48'W
<i>Stenella attenuata</i>	758	12/01/2003	MAC	14°38'N 109°48'W
<i>Stenella attenuata graffmani</i>	1412	9/28/2003	DSJ	11°47'N 87°16'W
<i>Stenella attenuata graffmani</i>	1396	9/27/2003	DSJ	12°39'N 88°43'W
<i>Stenella attenuata graffmani</i>	1396	9/27/2003	DSJ	12°39'N 88°43'W
<i>Stenella attenuata graffmani</i>	1396	9/27/2003	DSJ	12°39'N 88°43'W
<i>Stenella attenuata graffmani</i>	1396	9/27/2003	DSJ	12°39'N 88°43'W
<i>Stenella attenuata graffmani</i>	1396	9/27/2003	DSJ	12°39'N 88°43'W
<i>Stenella attenuata graffmani</i>	1396	9/27/2003	DSJ	12°39'N 88°43'W
<i>Stenella attenuata graffmani</i>	1396	9/27/2003	DSJ	12°39'N 88°43'W
<i>Stenella attenuata graffmani</i>	1400	9/27/2003	DSJ	12°39'N 88°34'W
<i>Stenella attenuata graffmani</i>	1426	9/29/2003	DSJ	10°22'N 85°57'W
<i>Stenella attenuata graffmani</i>	1426	9/29/2003	DSJ	10°22'N 85°57'W
<i>Stenella attenuata graffmani</i>	1317	9/18/2003	DSJ	16° 3'N 98°20'W
<i>Stenella attenuata graffmani</i>	1314	9/17/2003	DSJ	16°40'N 99°45'W
<i>Stenella attenuata graffmani</i>	1400	9/27/2003	DSJ	12°39'N 88°34'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1167	8/13/2003	DSJ	24° 6'N 107°52'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1315	9/17/2003	DSJ	16°37'N 99°40'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1317	9/18/2003	DSJ	16° 3'N 98°20'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock	Sighting Number	Date	Ship	Position
<i>Stenella attenuata graffmani</i>	1314	9/17/2003	DSJ	16°40'N 99°45'W
<i>Stenella attenuata graffmani</i>	1316	9/17/2003	DSJ	16°34'N 99°34'W
<i>Stenella attenuata graffmani</i>	1316	9/17/2003	DSJ	16°34'N 99°34'W
<i>Stenella attenuata graffmani</i>	1316	9/17/2003	DSJ	16°34'N 99°34'W
<i>Stenella attenuata graffmani</i>	1316	9/17/2003	DSJ	16°34'N 99°34'W
<i>Stenella attenuata graffmani</i>	1317	9/18/2003	DSJ	16° 3'N 98°20'W
<i>Stenella attenuata graffmani</i>	1317	9/18/2003	DSJ	16° 3'N 98°20'W
<i>Stenella attenuata graffmani</i>	1317	9/18/2003	DSJ	16° 3'N 98°20'W
<i>Stenella attenuata graffmani</i>	1306	9/06/2003	DSJ	17°10'N 100°58'W
<i>Stenella attenuata graffmani</i>	1531	10/29/2003	DSJ	15° 6'N 93°44'W
<i>Stenella attenuata graffmani</i>	1514	10/28/2003	DSJ	13°49'N 91°51'W
<i>Stenella attenuata graffmani</i>	1524	10/29/2003	DSJ	15° 5'N 93° 7'W
<i>Stenella attenuata graffmani</i>	1524	10/29/2003	DSJ	15° 5'N 93° 7'W
<i>Stenella attenuata graffmani</i>	1524	10/29/2003	DSJ	15° 5'N 93° 7'W
<i>Stenella attenuata graffmani</i>	1525	10/29/2003	DSJ	15° 6'N 93°12'W
<i>Stenella attenuata graffmani</i>	1509	10/28/2003	DSJ	13°48'N 91°30'W
<i>Stenella attenuata graffmani</i>	1528	10/29/2003	DSJ	15° 5'N 93°18'W
<i>Stenella attenuata graffmani</i>	1531	10/29/2003	DSJ	15° 6'N 93°44'W
<i>Stenella attenuata graffmani</i>	1531	10/29/2003	DSJ	15° 6'N 93°44'W
<i>Stenella attenuata graffmani</i>	1531	10/29/2003	DSJ	15° 6'N 93°44'W
<i>Stenella attenuata graffmani</i>	1531	10/29/2003	DSJ	15° 6'N 93°44'W
<i>Stenella attenuata graffmani</i>	1537	10/30/2003	DSJ	16° 6'N 94°37'W
<i>Stenella attenuata graffmani</i>	1531	10/29/2003	DSJ	15° 6'N 93°44'W
<i>Stenella attenuata graffmani</i>	1531	10/29/2003	DSJ	15° 6'N 93°44'W
<i>Stenella attenuata graffmani</i>	1503	10/28/2003	DSJ	13°50'N 90°53'W
<i>Stenella attenuata graffmani</i>	1652	11/17/2003	DSJ	17°39'N 102° 4'W
<i>Stenella attenuata graffmani</i>	1652	11/17/2003	DSJ	17°39'N 102° 4'W
<i>Stenella attenuata graffmani</i>	1653	11/17/2003	DSJ	17°40'N 102°10'W
<i>Stenella attenuata graffmani</i>	1658	11/17/2003	DSJ	17°50'N 102°31'W
<i>Stenella attenuata graffmani</i>	1661	11/22/2003	DSJ	19° 4'N 104°28'W
<i>Stenella attenuata graffmani</i>	1503	10/28/2003	DSJ	13°50'N 90°53'W
<i>Stenella attenuata graffmani</i>	508	11/08/2003	MAC	0° 1'N 80°30'W
<i>Stenella attenuata graffmani</i>	508	11/08/2003	MAC	0° 1'N 80°30'W
<i>Stenella attenuata graffmani</i>	508	11/08/2003	MAC	0° 1'N 80°30'W
<i>Stenella attenuata graffmani</i>	508	11/08/2003	MAC	0° 1'N 80°30'W
<i>Stenella attenuata graffmani</i>	508	11/08/2003	MAC	0° 1'N 80°30'W
<i>Stenella attenuata graffmani</i>	508	11/08/2003	MAC	0° 1'N 80°30'W
<i>Stenella attenuata graffmani</i>	508	11/08/2003	MAC	0° 1'N 80°30'W
<i>Stenella attenuata graffmani</i>	508	11/08/2003	MAC	0° 1'N 80°30'W
<i>Stenella attenuata graffmani</i>	511	11/08/2003	MAC	0°42'N 80°12'W
<i>Stenella attenuata graffmani</i>	513	11/09/2003	MAC	0°58'N 80° 1'W
<i>Stenella attenuata graffmani</i>	515	11/09/2003	MAC	0°57'N 80° 3'W
<i>Stenella attenuata graffmani</i>	515	11/09/2003	MAC	0°57'N 80° 3'W
<i>Stenella attenuata graffmani</i>	515	11/09/2003	MAC	0°57'N 80° 3'W
<i>Stenella attenuata graffmani</i>	515	11/09/2003	MAC	0°57'N 80° 3'W
<i>Stenella attenuata graffmani</i>	517	11/09/2003	MAC	1° 9'N 79°43'W
<i>Stenella attenuata graffmani</i>	517	11/09/2003	MAC	1° 9'N 79°43'W
<i>Stenella attenuata graffmani</i>	517	11/09/2003	MAC	1° 9'N 79°43'W
<i>Stenella attenuata graffmani</i>	517	11/09/2003	MAC	1° 9'N 79°43'W
<i>Stenella attenuata graffmani</i>	517	11/09/2003	MAC	1° 9'N 79°43'W
<i>Stenella attenuata graffmani</i>	517	11/09/2003	MAC	1° 9'N 79°43'W
<i>Stenella attenuata graffmani</i>	545	11/14/2003	MAC	7°25'N 78°20'W
<i>Stenella attenuata graffmani</i>	545	11/14/2003	MAC	7°25'N 78°20'W
<i>Stenella attenuata graffmani</i>	550	11/14/2003	MAC	7°43'N 78°36'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock		Sighting Number	Date	Ship	Position
<i>Stenella attenuata graffmani</i>		555	11/14/2003	MAC	7°57'N 78°52'W
<i>Stenella attenuata graffmani</i>		556	11/14/2003	MAC	8° 0'N 78°55'W
<i>Stenella attenuata graffmani</i>		567	11/20/2003	MAC	7° 9'N 80°56'W
<i>Stenella attenuata graffmani</i>		570	11/20/2003	MAC	7°12'N 81° 1'W
<i>Stenella attenuata graffmani</i>		570	11/20/2003	MAC	7°12'N 81° 1'W
<i>Stenella attenuata graffmani</i>		587	11/20/2003	MAC	7° 6'N 81°40'W
<i>Stenella attenuata graffmani</i>		587	11/20/2003	MAC	7° 6'N 81°40'W
<i>Stenella attenuata graffmani</i>		587	11/20/2003	MAC	7° 6'N 81°40'W
<i>Stenella attenuata graffmani</i>		587	11/20/2003	MAC	7° 6'N 81°40'W
<i>Stenella attenuata graffmani</i>		587	11/20/2003	MAC	7° 6'N 81°40'W
<i>Stenella attenuata graffmani</i>		587	11/20/2003	MAC	7° 6'N 81°40'W
<i>Stenella attenuata graffmani</i>		588	11/20/2003	MAC	7°18'N 81°59'W
<i>Stenella attenuata graffmani</i>		588	11/20/2003	MAC	7°18'N 81°59'W
<i>Stenella attenuata graffmani</i>		597	11/21/2003	MAC	8°24'N 83°37'W
<i>Stenella attenuata graffmani</i>		597	11/21/2003	MAC	8°24'N 83°37'W
<i>Stenella attenuata graffmani</i>		597	11/21/2003	MAC	8°24'N 83°37'W
<i>Stenella attenuata graffmani</i>		601	11/21/2003	MAC	8°32'N 83°52'W
<i>Stenella attenuata graffmani</i>		602	11/21/2003	MAC	8°40'N 83°58'W
<i>Stenella attenuata graffmani</i>		604	11/21/2003	MAC	8°55'N 84° 5'W
<i>Stenella attenuata graffmani</i>		605	11/21/2003	MAC	8°57'N 84° 8'W
<i>Stenella attenuata graffmani</i>		605	11/21/2003	MAC	8°57'N 84° 8'W
<i>Stenella attenuata graffmani</i>		605	11/21/2003	MAC	8°57'N 84° 8'W
<i>Stenella attenuata</i> subsp.		1663	11/22/2003	DSJ	19° 3'N 104°32'W
<i>Stenella attenuata</i> subsp.		1663	11/22/2003	DSJ	19° 3'N 104°32'W
<i>Stenella attenuata</i> subsp.		1393	3/27/2003	DSJ	12°40'N 89° 9'W
<i>Stenella attenuata</i> subsp.		1665	11/22/2003	DSJ	19° 4'N 104°38'W
<i>Stenella attenuata</i> subsp.		1393	3/27/2003	DSJ	12°40'N 89° 9'W
<i>Stenella attenuata</i> subsp.		1665	11/22/2003	DSJ	19° 4'N 104°38'W
<i>Stenella attenuata</i> subsp.		1665	11/22/2003	DSJ	19° 4'N 104°38'W
<i>Stenella attenuata</i> subsp.		1655	11/17/2003	DSJ	17°40'N 102°16'W
<i>Stenella attenuata</i> subsp.		1202	8/16/2003	DSJ	19°56'N 105°39'W
<i>Stenella attenuata</i> subsp.		1202	8/16/2003	DSJ	19°56'N 105°39'W
<i>Stenella attenuata</i> subsp.		1665	11/22/2003	DSJ	19° 4'N 104°38'W
<i>Stenella coeruleoalba</i>		1230	8/21/2003	DSJ	17°28'N 106° 0'W
<i>Stenella coeruleoalba</i>		1070	8/08/2003	DSJ	22°42'N 111° 8'W
<i>Stenella coeruleoalba</i>		1230	8/21/2003	DSJ	17°28'N 106° 0'W
<i>Stenella coeruleoalba</i>		1070	8/08/2003	DSJ	22°42'N 111° 8'W
<i>Stenella coeruleoalba</i>		1070	8/08/2003	DSJ	22°42'N 111° 8'W
<i>Stenella coeruleoalba</i>		1225	8/21/2003	DSJ	17°33'N 106°49'W
<i>Stenella longirostris centroamericana</i>	1401		9/27/2003	DSJ	12°35'N 88°32'W
<i>Stenella longirostris centroamericana</i>	1401		9/27/2003	DSJ	12°35'N 88°32'W
<i>Stenella longirostris centroamericana</i>	1401		9/27/2003	DSJ	12°35'N 88°32'W
<i>Stenella longirostris centroamericana</i>	1401		9/27/2003	DSJ	12°35'N 88°32'W
<i>Stenella longirostris centroamericana</i>	1401		9/27/2003	DSJ	12°35'N 88°32'W
<i>Stenella longirostris centroamericana</i>	1401		9/27/2003	DSJ	12°35'N 88°32'W
<i>Stenella longirostris centroamericana</i>	1401		9/27/2003	DSJ	12°35'N 88°32'W
<i>Stenella longirostris centroamericana</i>	1401		9/27/2003	DSJ	12°35'N 88°32'W
<i>Stenella longirostris orientalis</i>	1279		8/30/2003	DSJ	11°20'N 119°35'W
<i>Stenella longirostris orientalis</i>	1324		9/19/2003	DSJ	14°45'N 99° 6'W
<i>Stenella longirostris orientalis</i>	1324		9/19/2003	DSJ	14°45'N 99° 6'W
<i>Stenella longirostris orientalis</i>	1324		9/19/2003	DSJ	14°45'N 99° 6'W
<i>Stenella longirostris orientalis</i>	1326		9/20/2003	DSJ	13°23'N 101°26'W
<i>Stenella longirostris orientalis</i>	1339		9/22/2003	DSJ	13°30'N 95°28'W
<i>Stenella longirostris orientalis</i>	1557		10/31/2003	DSJ	14°30'N 97°17'W
<i>Stenella longirostris orientalis</i>	1571		11/01/2003	DSJ	15°11'N 101° 6'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock	Sighting Number	Date	Ship	Position	
<i>Stenella longirostris orientalis</i>	1188	8/15/2003	DSJ	21°27'N	106° 4'W
<i>Stenella longirostris orientalis</i>	1188	8/15/2003	DSJ	21°27'N	106° 4'W
<i>Stenella longirostris orientalis</i>	1188	8/15/2003	DSJ	21°27'N	106° 4'W
<i>Stenella longirostris orientalis</i>	1196	8/16/2003	DSJ	20°14'N	106°29'W
<i>Stenella longirostris orientalis</i>	1196	8/16/2003	DSJ	20°14'N	106°29'W
<i>Stenella longirostris orientalis</i>	1196	8/16/2003	DSJ	20°14'N	106°29'W
<i>Stenella longirostris orientalis</i>	1279	8/30/2003	DSJ	11°20'N	119°35'W
<i>Stenella longirostris orientalis</i>	1557	10/31/2003	DSJ	14°30'N	97°17'W
<i>Stenella longirostris orientalis</i>	1300	9/05/2003	DSJ	17°16'N	102°46'W
<i>Stenella longirostris orientalis</i>	1553	10/31/2003	DSJ	14°42'N	97° 5'W
<i>Stenella longirostris orientalis</i>	1279	8/30/2003	DSJ	11°20'N	119°35'W
<i>Stenella longirostris orientalis</i>	1279	8/30/2003	DSJ	11°20'N	119°35'W
<i>Stenella longirostris orientalis</i>	1279	8/30/2003	DSJ	11°20'N	119°35'W
<i>Stenella longirostris orientalis</i>	1196	8/16/2003	DSJ	20°14'N	106°29'W
<i>Stenella longirostris orientalis</i>	1279	8/30/2003	DSJ	11°20'N	119°35'W
<i>Stenella longirostris orientalis</i>	1339	9/22/2003	DSJ	13°30'N	95°28'W
<i>Stenella longirostris orientalis</i>	1279	8/30/2003	DSJ	11°20'N	119°35'W
<i>Stenella longirostris orientalis</i>	1196	8/16/2003	DSJ	20°14'N	106°29'W
<i>Stenella longirostris orientalis</i>	1492	10/22/2003	DSJ	11°54'N	95°21'W
<i>Stenella longirostris orientalis</i>	1492	10/22/2003	DSJ	11°54'N	95°21'W
<i>Stenella longirostris orientalis</i>	1492	10/22/2003	DSJ	11°54'N	95°21'W
<i>Stenella longirostris orientalis</i>	1494	10/23/2003	DSJ	12°31'N	93°47'W
<i>Stenella longirostris orientalis</i>	1196	8/16/2003	DSJ	20°14'N	106°29'W
<i>Stenella longirostris orientalis</i>	1494	10/23/2003	DSJ	12°31'N	93°47'W
<i>Stenella longirostris orientalis</i>	1494	10/23/2003	DSJ	12°31'N	93°47'W
<i>Stenella longirostris orientalis</i>	1494	10/23/2003	DSJ	12°31'N	93°47'W
<i>Stenella longirostris orientalis</i>	1492	10/22/2003	DSJ	11°54'N	95°21'W
<i>Stenella longirostris subsp.?</i>	1178	8/14/2003	DSJ	21°26'N	106° 6'W
<i>Stenella longirostris subsp.?</i>	1178	8/14/2003	DSJ	21°26'N	106° 6'W
<i>Stenella longirostris subsp.?</i>	1178	8/14/2003	DSJ	21°26'N	106° 6'W
<i>Stenella longirostris subsp.?</i>	1178	8/14/2003	DSJ	21°26'N	106° 6'W
<i>Stenella longirostris subsp.?</i>	1178	8/14/2003	DSJ	21°26'N	106° 6'W
<i>Stenella longirostris subsp.?</i>	1178	8/14/2003	DSJ	21°26'N	106° 6'W
<i>Stenella longirostris subsp.?</i>	1178	8/14/2003	DSJ	21°26'N	106° 6'W
<i>Stenella longirostris subsp.?</i>	1178	8/14/2003	DSJ	21°26'N	106° 6'W
<i>Stenella longirostris subsp.?</i>	1178	8/14/2003	DSJ	21°26'N	106° 6'W
<i>Stenella longirostris subsp.?</i>	1170	8/13/2003	DSJ	23°38'N	107°23'W
<i>Stenella longirostris subsp.?</i>	1172	8/14/2003	DSJ	22°15'N	106°24'W
<i>Stenella longirostris subsp.?</i>	1172	8/14/2003	DSJ	22°15'N	106°24'W
<i>Stenella longirostris subsp.?</i>	1172	8/14/2003	DSJ	22°15'N	106°24'W
<i>Stenella longirostris subsp.?</i>	1172	8/14/2003	DSJ	22°15'N	106°24'W
<i>Stenella longirostris subsp.?</i>	1170	8/13/2003	DSJ	23°38'N	107°23'W
<i>Stenella longirostris subsp.?</i>	1170	8/13/2003	DSJ	23°38'N	107°23'W
<i>Stenella longirostris subsp.?</i>	1170	8/13/2003	DSJ	23°38'N	107°23'W
<i>Stenella longirostris subsp.?</i>	1170	8/13/2003	DSJ	23°38'N	107°23'W
<i>Stenella longirostris subsp.?</i>	1172	8/14/2003	DSJ	22°15'N	106°24'W
<i>Stenella longirostris subsp.?</i>	1172	8/14/2003	DSJ	22°15'N	106°24'W
<i>Stenella longirostris subsp.?</i>	1172	8/14/2003	DSJ	22°15'N	106°24'W
<i>Stenella longirostris subsp.?</i>	1170	8/13/2003	DSJ	23°38'N	107°23'W
<i>Stenella orientalis/centroamericana</i>	1365	9/24/2003	DSJ	13° 8'N	90°21'W
<i>Stenella orientalis/centroamericana</i>	1365	9/24/2003	DSJ	13° 8'N	90°21'W
<i>Stenella orientalis/centroamericana</i>	1365	9/24/2003	DSJ	13° 8'N	90°21'W
<i>Stenella orientalis/centroamericana</i>	1365	9/24/2003	DSJ	13° 8'N	90°21'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock		Sighting Number	Date	Ship	Position
<i>Stenella orientalis/centroamericana</i>		1365	9/24/2003	DSJ	13° 8'N 90°21'W
<i>Stenella orientalis/centroamericana</i>		1365	9/24/2003	DSJ	13° 8'N 90°21'W
<i>Stenella orientalis/centroamericana</i>		1365	9/24/2003	DSJ	13° 8'N 90°21'W
<i>Stenella orientalis/centroamericana</i>		1365	9/24/2003	DSJ	13° 8'N 90°21'W
<i>Stenella orientalis/centroamericana</i>		1365	9/24/2003	DSJ	13° 8'N 90°21'W
<i>Stenella orientalis/centroamericana</i>		1365	9/24/2003	DSJ	13° 8'N 90°21'W
<i>Stenella orientalis/centroamericana</i>		1365	9/24/2003	DSJ	13° 8'N 90°21'W
<i>Stenella orientalis/centroamericana</i>		1365	9/24/2003	DSJ	13° 8'N 90°21'W
<i>Stenella orientalis/centroamericana</i>		1365	9/24/2003	DSJ	13° 8'N 90°21'W
<i>Steno bredanensis</i>		1643	11/16/2003	DSJ	16°56'N 101° 4'W
<i>Steno bredanensis</i>		1331	9/21/2003	DSJ	13° 9'N 99°11'W
<i>Steno bredanensis</i>		1236	8/22/2003	DSJ	16°56'N 108° 4'W
<i>Steno bredanensis</i>		1579	11/02/2003	DSJ	13°30'N 104° 4'W
<i>Steno bredanensis</i>		1331	9/21/2003	DSJ	13° 9'N 99°11'W
<i>Steno bredanensis</i>		1441	10/10/2003	DSJ	6° 4'N 90°18'W
<i>Steno bredanensis</i>		1388	9/26/2003	DSJ	11°14'N 88°36'W
<i>Steno bredanensis</i>		1388	9/26/2003	DSJ	11°14'N 88°36'W
<i>Steno bredanensis</i>		1204	8/16/2003	DSJ	19°51'N 105°36'W
<i>Steno bredanensis</i>		1205	8/16/2003	DSJ	19°45'N 105°27'W
<i>Steno bredanensis</i>		1579	11/02/2003	DSJ	13°30'N 104° 4'W
<i>Steno bredanensis</i>		1579	11/02/2003	DSJ	13°30'N 104° 4'W
<i>Steno bredanensis</i>		1331	9/21/2003	DSJ	13° 9'N 99°11'W
<i>Tursiops truncatus</i>		1163	8/13/2003	DSJ	24°18'N 108° 7'W
<i>Tursiops truncatus</i>		1241	8/22/2003	DSJ	16°42'N 108°46'W
<i>Tursiops truncatus</i>		1163	8/13/2003	DSJ	24°18'N 108° 7'W
<i>Tursiops truncatus</i>		1241	8/22/2003	DSJ	16°42'N 108°46'W
<i>Tursiops truncatus</i>		1241	8/22/2003	DSJ	16°42'N 108°46'W
<i>Tursiops truncatus</i>		1163	8/13/2003	DSJ	24°18'N 108° 7'W
<i>Tursiops truncatus</i>		1490	10/21/2003	DSJ	11°36'N 97°39'W
<i>Tursiops truncatus</i>		1176	8/14/2003	DSJ	21°43'N 106°11'W
<i>Tursiops truncatus</i>		1176	8/14/2003	DSJ	21°43'N 106°11'W
<i>Tursiops truncatus</i>		1176	8/14/2003	DSJ	21°43'N 106°11'W
<i>Tursiops truncatus</i>		1045	8/04/2003	DSJ	24°48'N 112°30'W
<i>Tursiops truncatus</i>		1186	8/15/2003	DSJ	21°41'N 107°54'W
<i>Tursiops truncatus</i>		1578	11/02/2003	DSJ	13°31'N 104° 0'W
<i>Tursiops truncatus</i>		1566	11/01/2003	DSJ	15°16'N 100°48'W
<i>Tursiops truncatus</i>		1490	10/21/2003	DSJ	11°36'N 97°39'W
<i>Tursiops truncatus</i>		1163	8/13/2003	DSJ	24°18'N 108° 7'W
<i>Tursiops truncatus</i>		1490	10/21/2003	DSJ	11°36'N 97°39'W
<i>Tursiops truncatus</i>		1293	8/31/2003	DSJ	12°24'N 116°37'W
<i>Tursiops truncatus</i>		1496	10/23/2003	DSJ	12°49'N 93°16'W
<i>Tursiops truncatus</i>		1234	8/22/2003	DSJ	17° 0'N 107°41'W
<i>Tursiops truncatus</i>		1562	10/31/2003	DSJ	14°47'N 97°52'W
<i>Tursiops truncatus</i>		1496	10/23/2003	DSJ	12°49'N 93°16'W
<i>Tursiops truncatus</i>		1163	8/13/2003	DSJ	24°18'N 108° 7'W
<i>Tursiops truncatus</i>		1497	10/23/2003	DSJ	12°53'N 93°11'W
<i>Tursiops truncatus</i>		1353	9/24/2003	DSJ	13°37'N 90°46'W
<i>Tursiops truncatus</i>		1285	8/30/2003	DSJ	11°36'N 118°59'W
<i>Tursiops truncatus</i>		1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Tursiops truncatus</i>		1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Tursiops truncatus</i>		1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Tursiops truncatus</i>		1129	8/11/2003	DSJ	25°36'N 110°22'W
<i>Tursiops truncatus</i>		1336	9/22/2003	DSJ	13°28'N 95°45'W
<i>Tursiops truncatus</i>		1336	9/22/2003	DSJ	13°28'N 95°45'W
<i>Tursiops truncatus</i>		1336	9/22/2003	DSJ	13°28'N 95°45'W
<i>Tursiops truncatus</i>		1689	11/24/2003	DSJ	17°53'N 110°33'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock	Sighting Number	Date	Ship	Position
<i>Tursiops truncatus</i>	1345	9/23/2003	DSJ	13°32'N 93°41'W
<i>Tursiops truncatus</i>	1345	9/23/2003	DSJ	13°32'N 93°41'W
<i>Tursiops truncatus</i>	1140	8/11/2003	DSJ	26°16'N 110°51'W
<i>Tursiops truncatus</i>	1345	9/23/2003	DSJ	13°32'N 93°41'W
<i>Tursiops truncatus</i>	1146	8/11/2003	DSJ	26°33'N 111° 5'W
<i>Tursiops truncatus</i>	1711	12/01/2003	DSJ	19°34'N 113°40'W
<i>Tursiops truncatus</i>	1711	12/01/2003	DSJ	19°34'N 113°40'W
<i>Tursiops truncatus</i>	1092	8/09/2003	DSJ	21°41'N 110°11'W
<i>Tursiops truncatus</i>	1065	8/08/2003	DSJ	23° 5'N 110°38'W
<i>Tursiops truncatus</i>	1063	8/08/2003	DSJ	23°15'N 110°35'W
<i>Tursiops truncatus</i>	1366	9/25/2003	DSJ	12° 5'N 89°43'W
<i>Tursiops truncatus</i>	1368	9/25/2003	DSJ	11°38'N 89°44'W
<i>Tursiops truncatus</i>	1368	9/25/2003	DSJ	11°38'N 89°44'W
<i>Tursiops truncatus</i>	1063	8/08/2003	DSJ	23°15'N 110°35'W
<i>Tursiops truncatus</i>	1062	8/08/2003	DSJ	23°16'N 110°42'W
<i>Tursiops truncatus</i>	1061	8/08/2003	DSJ	23°20'N 110°45'W
<i>Tursiops truncatus</i>	1060	8/07/2003	DSJ	24°11'N 111°52'W
<i>Tursiops truncatus</i>	1345	9/23/2003	DSJ	13°32'N 93°41'W
<i>Tursiops truncatus</i>	1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Tursiops truncatus</i>	1265	8/27/2003	DSJ	12°38'N 123°20'W
<i>Tursiops truncatus</i>	1265	8/27/2003	DSJ	12°38'N 123°20'W
<i>Tursiops truncatus</i>	1265	8/27/2003	DSJ	12°38'N 123°20'W
<i>Tursiops truncatus</i>	1265	8/27/2003	DSJ	12°38'N 123°20'W
<i>Tursiops truncatus</i>	1505	10/28/2003	DSJ	13°49'N 91°10'W
<i>Tursiops truncatus</i>	1505	10/28/2003	DSJ	13°49'N 91°10'W
<i>Tursiops truncatus</i>	1163	8/13/2003	DSJ	24°18'N 108° 7'W
<i>Tursiops truncatus</i>	1162	8/13/2003	DSJ	24°22'N 108° 9'W
<i>Tursiops truncatus</i>	1176	8/14/2003	DSJ	21°43'N 106°11'W
<i>Tursiops truncatus</i>	1293	8/31/2003	DSJ	12°24'N 116°37'W
<i>Tursiops truncatus</i>	1152	8/12/2003	DSJ	26° 4'N 109°54'W
<i>Tursiops truncatus</i>	1152	8/12/2003	DSJ	26° 4'N 109°54'W
<i>Tursiops truncatus</i>	1137	8/11/2003	DSJ	26°13'N 119°49'W
<i>Tursiops truncatus</i>	1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Tursiops truncatus</i>	1265	8/27/2003	DSJ	12°38'N 123°20'W
<i>Tursiops truncatus</i>	1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Tursiops truncatus</i>	1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Tursiops truncatus</i>	1152	8/12/2003	DSJ	26° 4'N 109°54'W
<i>Tursiops truncatus</i>	1146	8/11/2003	DSJ	26°33'N 111° 5'W
<i>Tursiops truncatus</i>	1129	8/11/2003	DSJ	25°36'N 110°22'W
<i>Tursiops truncatus</i>	1150	8/11/2003	DSJ	26°42'N 111° 6'W
<i>Tursiops truncatus</i>	1150	8/11/2003	DSJ	26°42'N 111° 6'W
<i>Tursiops truncatus</i>	1150	8/11/2003	DSJ	26°42'N 111° 6'W
<i>Tursiops truncatus</i>	1150	8/11/2003	DSJ	26°42'N 111° 6'W
<i>Tursiops truncatus</i>	1532	10/29/2003	DSJ	15° 9'N 94° 3'W
<i>Tursiops truncatus</i>	366	10/11/2003	MAC	0°42'S 90°42'W
<i>Tursiops truncatus</i>	366	10/11/2003	MAC	0°42'S 90°42'W
<i>Tursiops truncatus</i>	366	10/11/2003	MAC	0°42'S 90°42'W
<i>Tursiops truncatus</i>	366	10/11/2003	MAC	0°42'S 90°42'W
<i>Tursiops truncatus</i>	366	10/11/2003	MAC	0°42'S 90°42'W
<i>Tursiops truncatus</i>	366	10/11/2003	MAC	0°42'S 90°42'W
<i>Tursiops truncatus</i>	366	10/11/2003	MAC	0°42'S 90°42'W
<i>Tursiops truncatus</i>	423	10/22/2003	MAC	11°57'S 88°11'W
<i>Tursiops truncatus</i>	423	10/22/2003	MAC	11°57'S 88°11'W
<i>Tursiops truncatus</i>	423	10/22/2003	MAC	11°57'S 88°11'W
<i>Tursiops truncatus</i>	446	11/01/2003	MAC	10°27'S 78°29'W

Table 14. Identity and sample location of skin biopsy samples (continued).

Species/Stock	Sighting Number	Date	Ship	Position
<i>Tursiops truncatus</i>	449	11/02/2003	MAC	9°59'S 78°56'W
<i>Tursiops truncatus</i>	449	11/02/2003	MAC	9°59'S 78°56'W
<i>Tursiops truncatus</i>	449	11/02/2003	MAC	9°59'S 78°56'W
<i>Tursiops truncatus</i>	449	11/02/2003	MAC	9°59'S 78°56'W
<i>Tursiops truncatus</i>	449	11/02/2003	MAC	9°59'S 78°56'W
<i>Tursiops truncatus</i>	449	11/02/2003	MAC	9°59'S 78°56'W
<i>Tursiops truncatus</i>	449	11/02/2003	MAC	9°59'S 78°56'W
<i>Tursiops truncatus</i>	449	11/02/2003	MAC	9°59'S 78°56'W
<i>Tursiops truncatus</i>	494	11/06/2003	MAC	3°28'S 81° 8'W
<i>Tursiops truncatus</i>	494	11/06/2003	MAC	3°28'S 81° 8'W
<i>Tursiops truncatus</i>	494	11/06/2003	MAC	3°28'S 81° 8'W
<i>Tursiops truncatus</i>	516	11/09/2003	MAC	1°13'N 80° 1'W
<i>Tursiops truncatus</i>	516	11/09/2003	MAC	1°13'N 80° 1'W
<i>Tursiops truncatus</i>	516	11/09/2003	MAC	1°13'N 80° 1'W
<i>Tursiops truncatus</i>	516	11/09/2003	MAC	1°13'N 80° 1'W
<i>Tursiops truncatus</i>	531	11/13/2003	MAC	6°23'N 80°43'W
<i>Tursiops truncatus</i>	531	11/13/2003	MAC	6°23'N 80°43'W
<i>Tursiops truncatus</i>	552	11/14/2003	MAC	7°51'N 78°49'W
<i>Tursiops truncatus</i>	580	11/20/2003	MAC	7°20'N 81°18'W
<i>Tursiops truncatus</i>	586	11/20/2003	MAC	7° 6'N 81°29'W
<i>Tursiops truncatus</i>	586	11/20/2003	MAC	7° 6'N 81°29'W
<i>Tursiops truncatus</i>	586	11/20/2003	MAC	7° 6'N 81°29'W
<i>Tursiops truncatus</i>	607	11/21/2003	MAC	9° 8'N 84°15'W
<i>Tursiops truncatus</i>	607	11/21/2003	MAC	9° 8'N 84°15'W
<i>Tursiops truncatus</i>	632	11/23/2003	MAC	8°52'N 88° 2'W
<i>Tursiops truncatus</i>	632	11/23/2003	MAC	8°52'N 88° 2'W

Table 15. Summary of skin biopsy samples of cetaceans obtained during STAR03, listed by number of samples.

Species/stocks	Total
<i>Tursiops truncatus</i>	114
<i>Stenella attenuata graffmani</i>	102
<i>Stenella attenuata</i>	63
<i>Globicephala macrorhynchus</i>	48
<i>Stenella longirostris orientalis</i>	35
<i>Delphinus capensis</i>	32
<i>Orcinus orca</i>	30
<i>Stenella longirostris</i> subsp.?	24
<i>Grampus griseus</i>	17
<i>Balaenoptera musculus</i>	16
<i>Steno bredanensis</i>	13
<i>Stenella orientalis/centroamericana</i>	12
<i>Balaenoptera edeni</i>	11
<i>Stenella attenuata</i> subsp.	11
<i>Delphinus delphis</i>	10
<i>Pseudorca crassidens</i>	7
<i>Stenella longirostris centroamericana</i>	7
<i>Lagenorhynchus obscurus</i>	6
<i>Stenella coeruleoalba</i>	6
<i>Physeter macrocephalus</i>	4
<i>Megaptera novaeangliae</i>	2
<i>Balaenoptera physalus</i>	1
<i>Berardius bairdii</i>	1
<i>Delphinus</i> sp.	1
<i>Mesoplodon peruvianus</i>	1
TOTAL	574

Table 16. Number of cetacean schools for which behavior observations were recorded during STAR03.

Sighting category	Total
<i>Delphinus capensis</i>	9
<i>Delphinus delphis</i>	85
<i>Delphinus</i> sp.	3
<i>Globicephala macrorhynchus</i>	11
<i>Globicephala</i> sp.	7
<i>Grampus griseus</i>	11
<i>Indopacetus pacificus</i>	1
<i>Lagenorhynchus obscurus</i>	1
<i>Megaptera novaeangliae</i>	1
<i>Orcinus orca</i>	2
<i>Pseudorca crassidens</i>	4
<i>Stenella attenuata</i> (offshore)	143
<i>Stenella attenuata</i> (unid. subsp.)	37
<i>Stenella attenuata graffmani</i>	41
<i>Stenella coeruleoalba</i>	160
<i>Stenella longirostris</i> (southwestern)	8
<i>Stenella longirostris</i> (unid. subsp.)	8
<i>Stenella longirostris</i> (whitebelly)	23
<i>Stenella longirostris orientalis</i>	68
<i>Steno bredanensis</i>	30
<i>Tursiops truncatus</i>	143
Unidentified dolphin or porpoise	11
Total	807

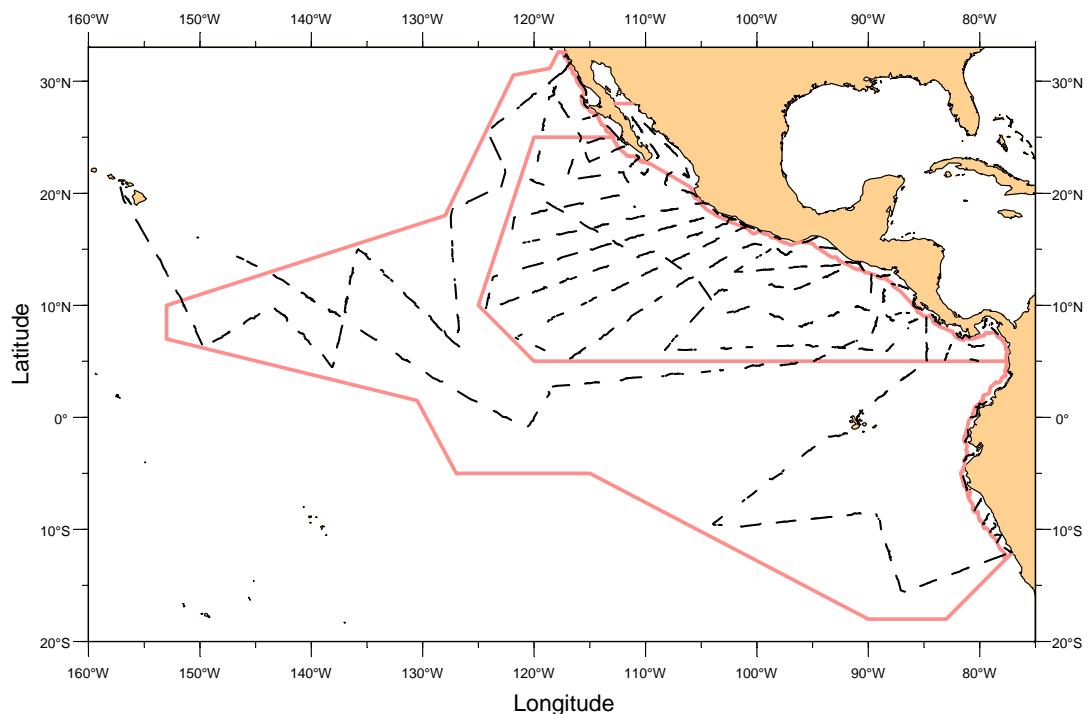


Figure 1. STAR03 survey tracklines and sampling strata boundaries for both NOAA ships *McArthur II* and *David Starr Jordan*.

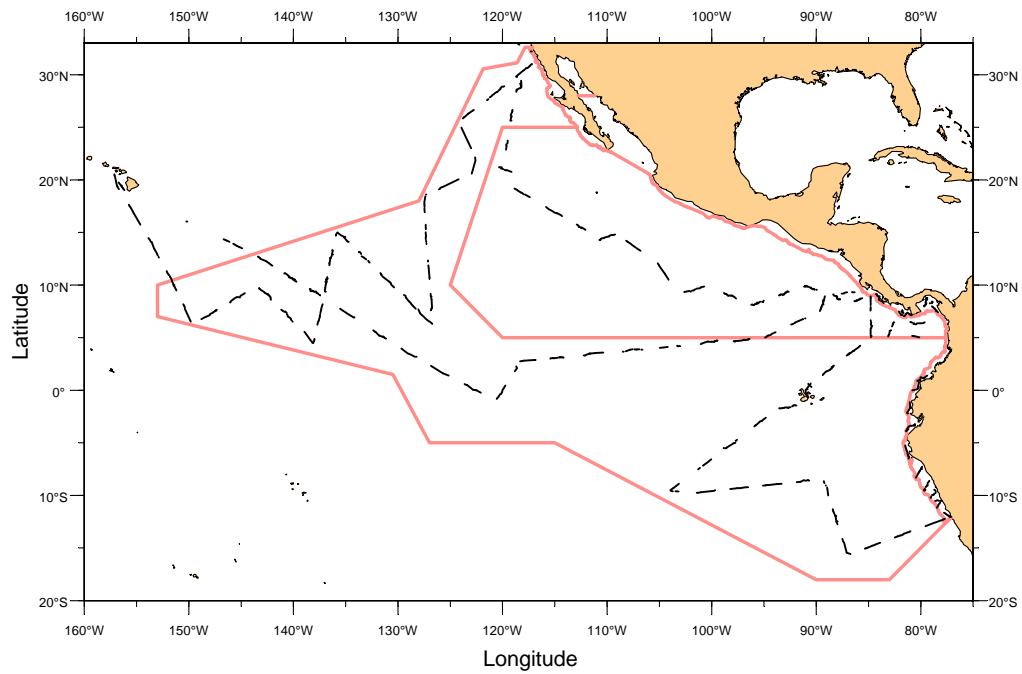


Figure 2. STAR03 survey tracklines for NOAA Ship *McArthur II*.

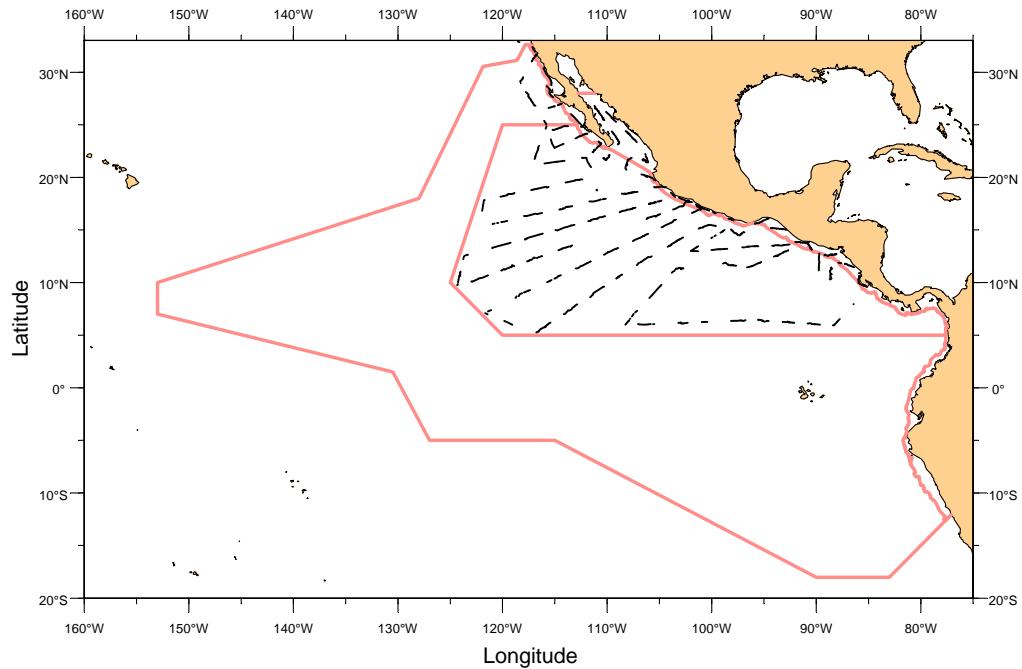


Figure 3. STAR03 survey tracklines for NOAA Ship *David Starr Jordan*.

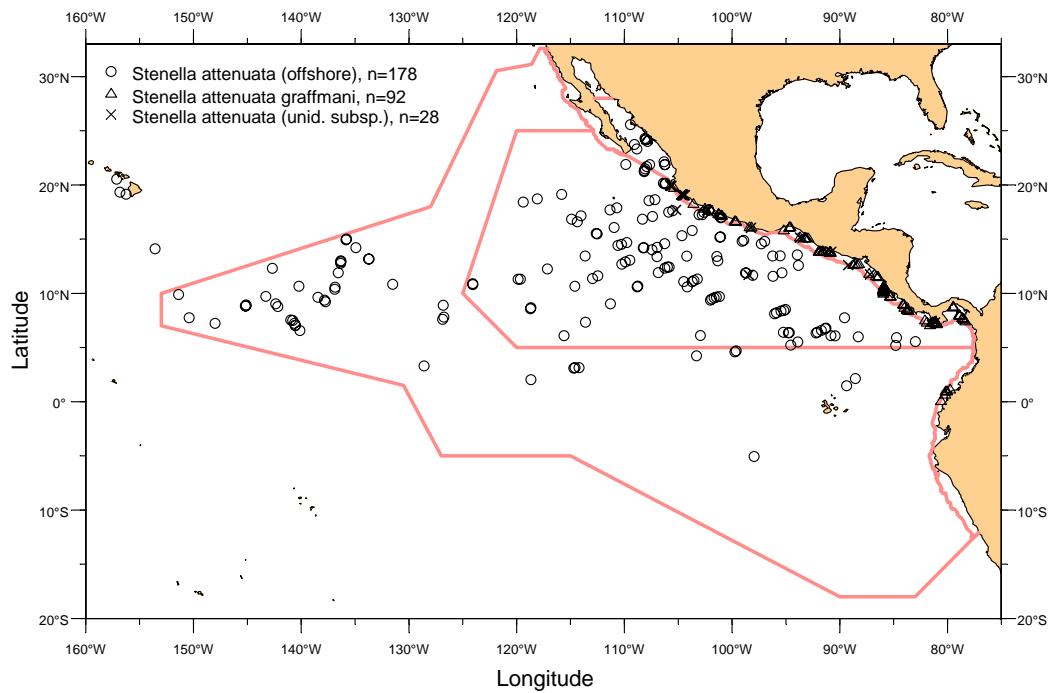


Figure 4. Spotted dolphin sightings, STAR03.

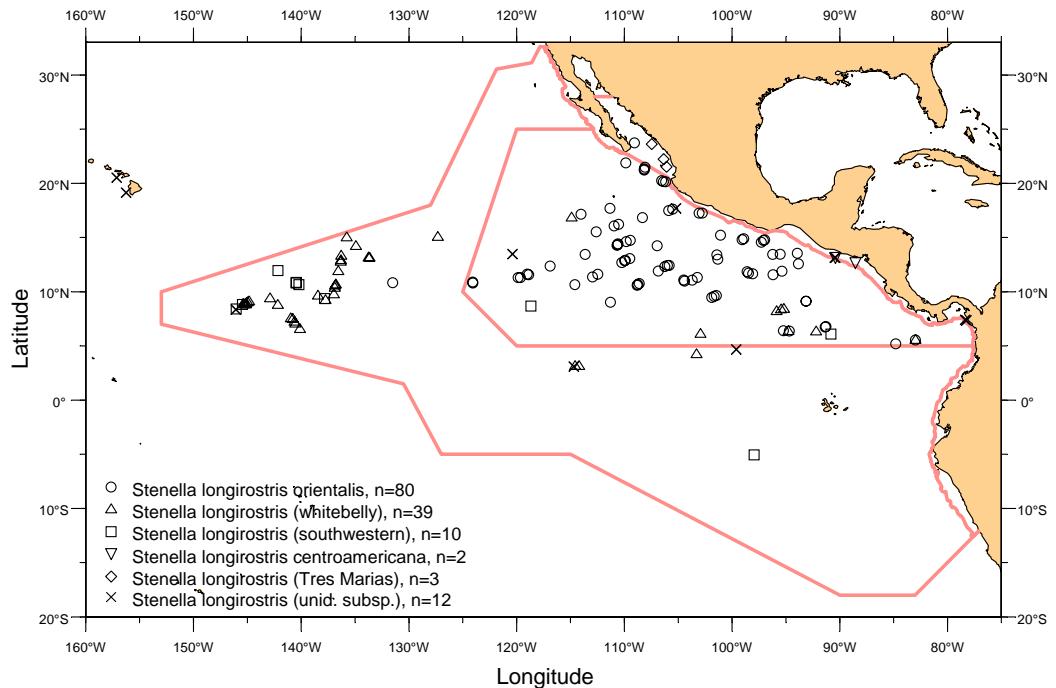


Figure 5. Spinner dolphin sightings, STAR03.

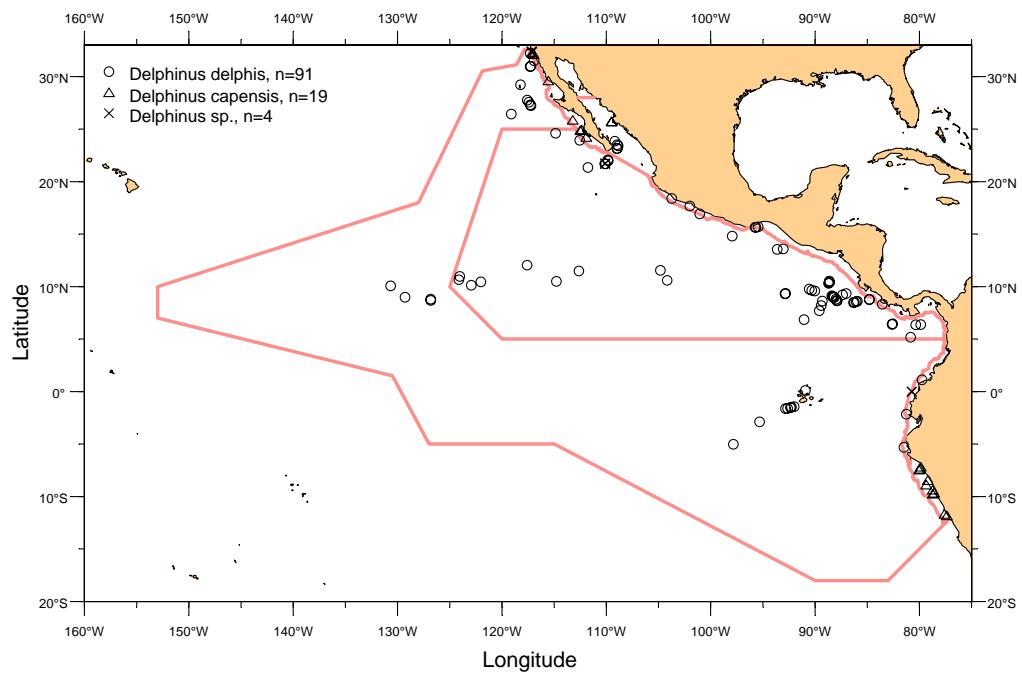


Figure 6. Common dolphin sightings, STAR03.

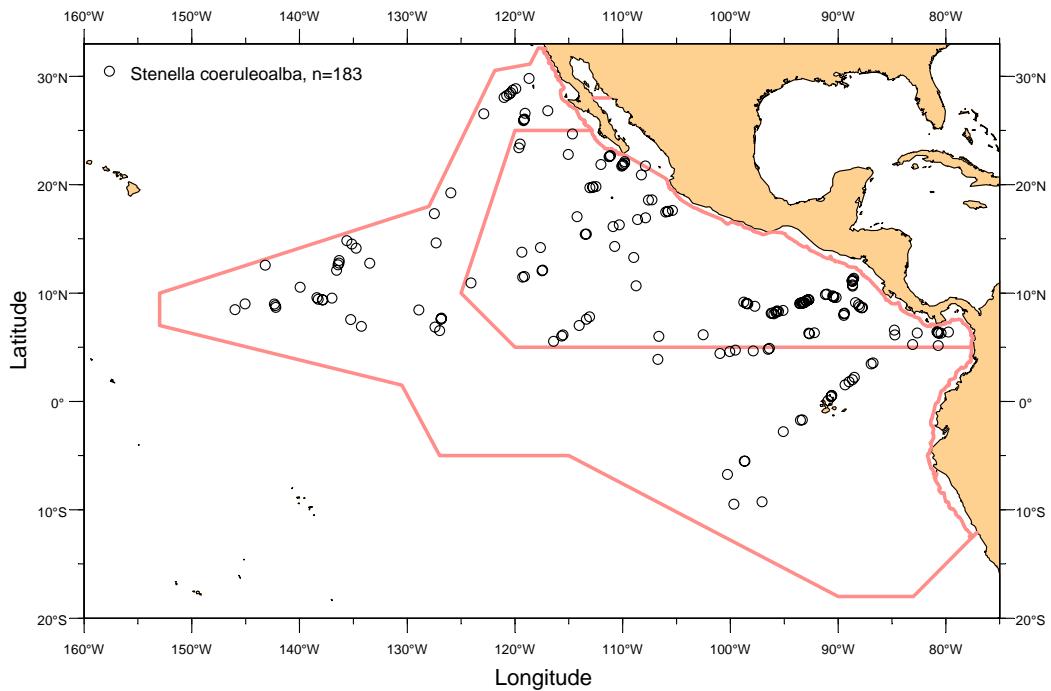


Figure 7. Striped dolphin sightings, STAR03.

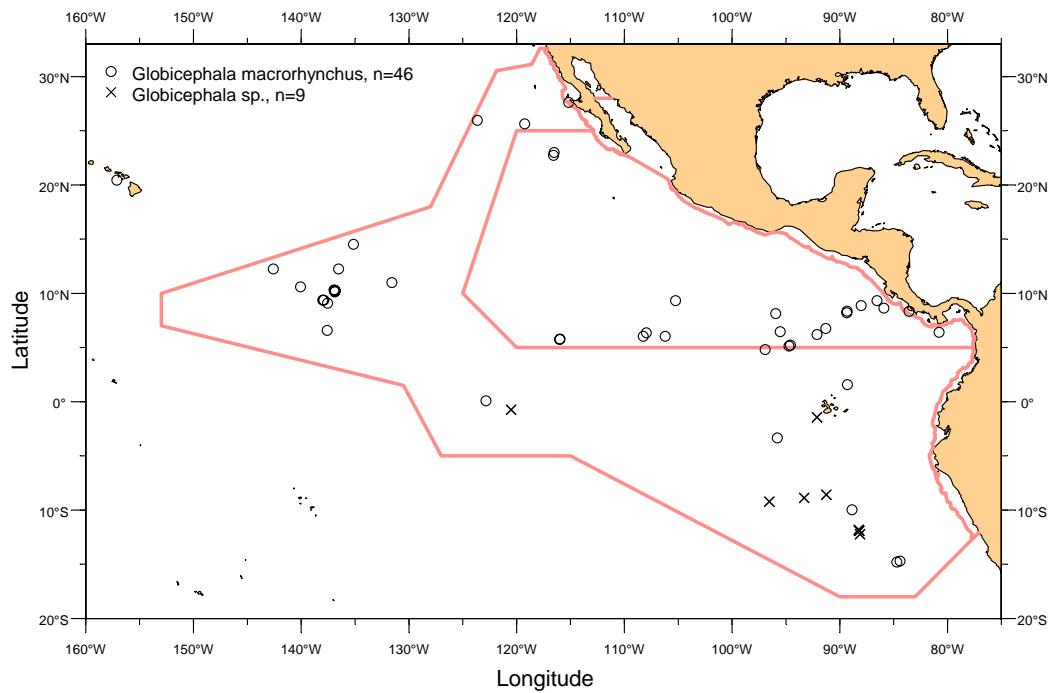


Figure 8. Pilot whale sightings, STAR03.

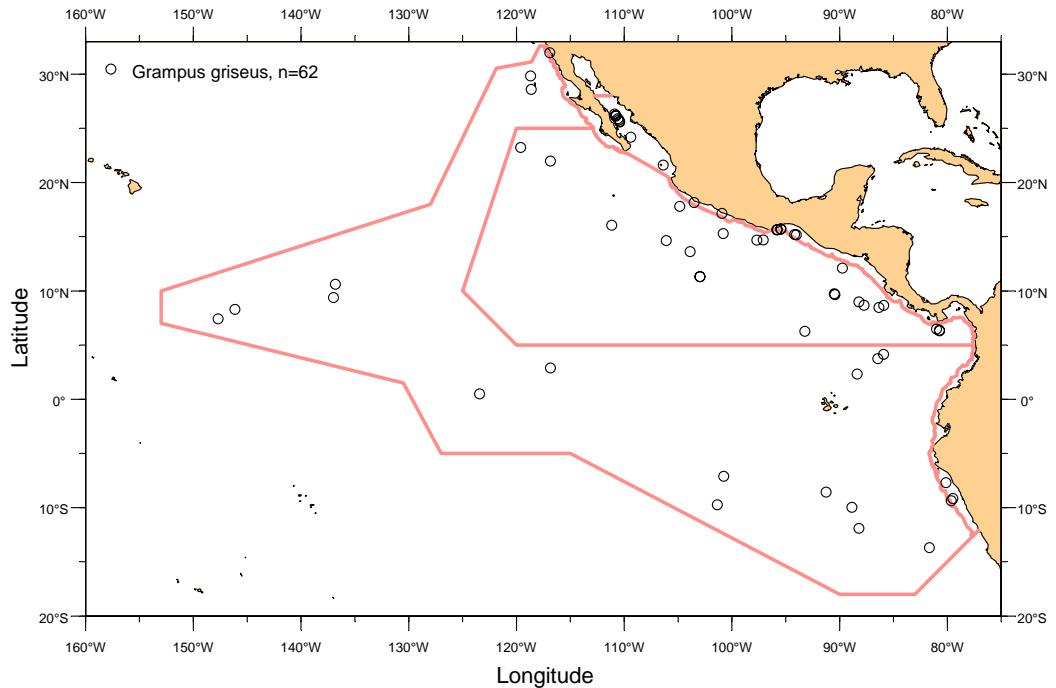


Figure 9. Risso's dolphin sightings, STAR03.

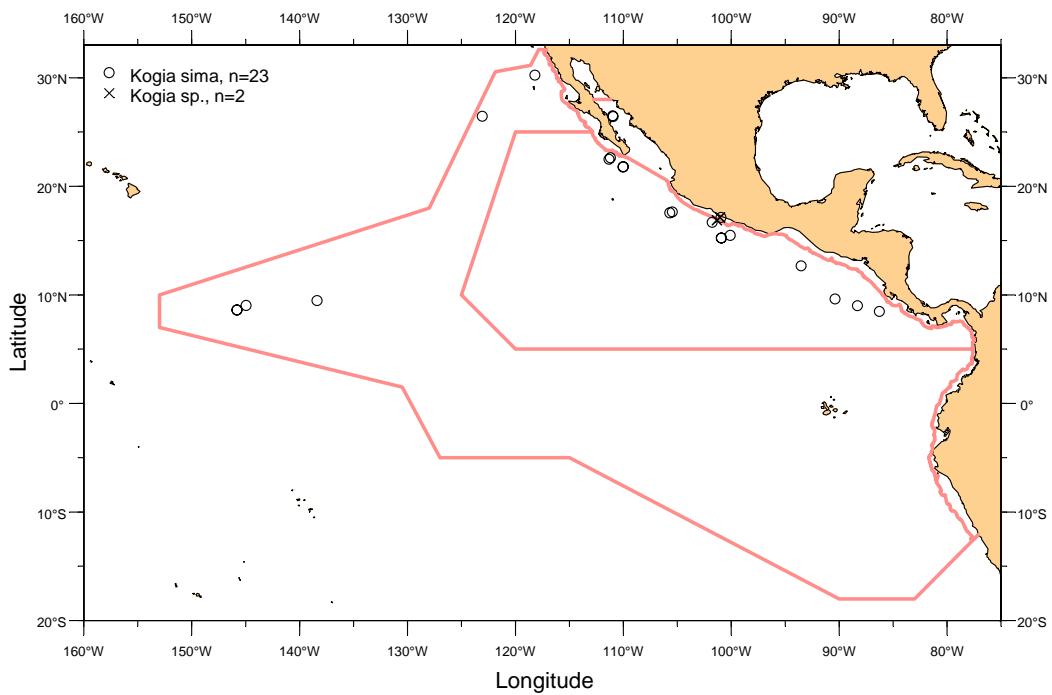


Figure 10. Dwarf sperm whale and unidentified *Kogia* sp. sightings, STAR03.

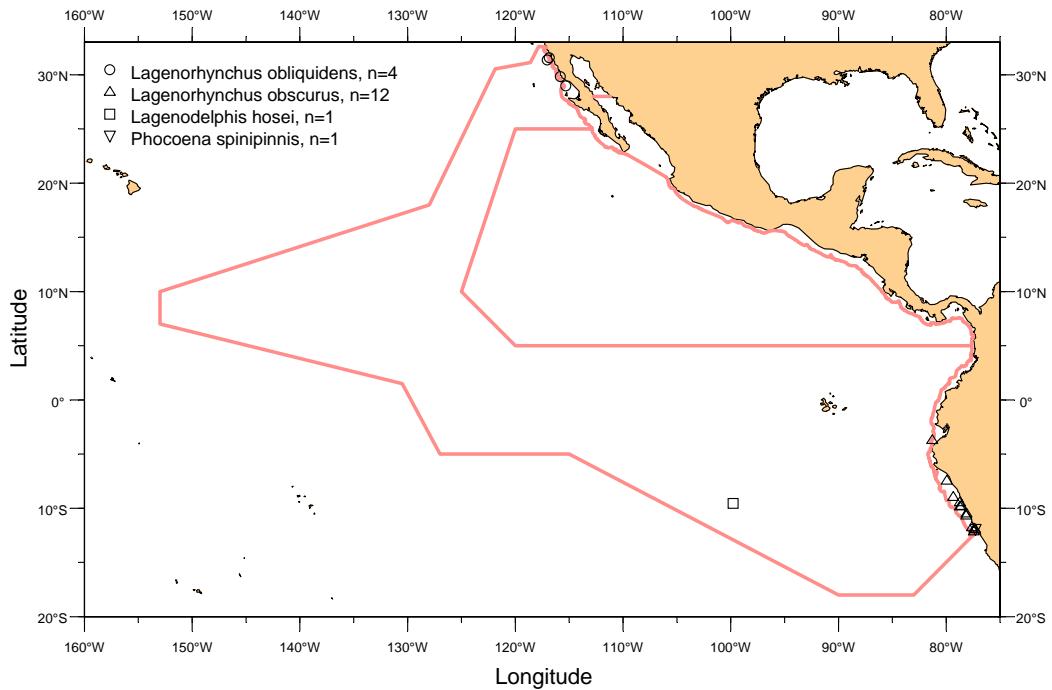


Figure 11. Pacific white-sided, dusky, Fraser's and Burmeister's sightings, STAR03.

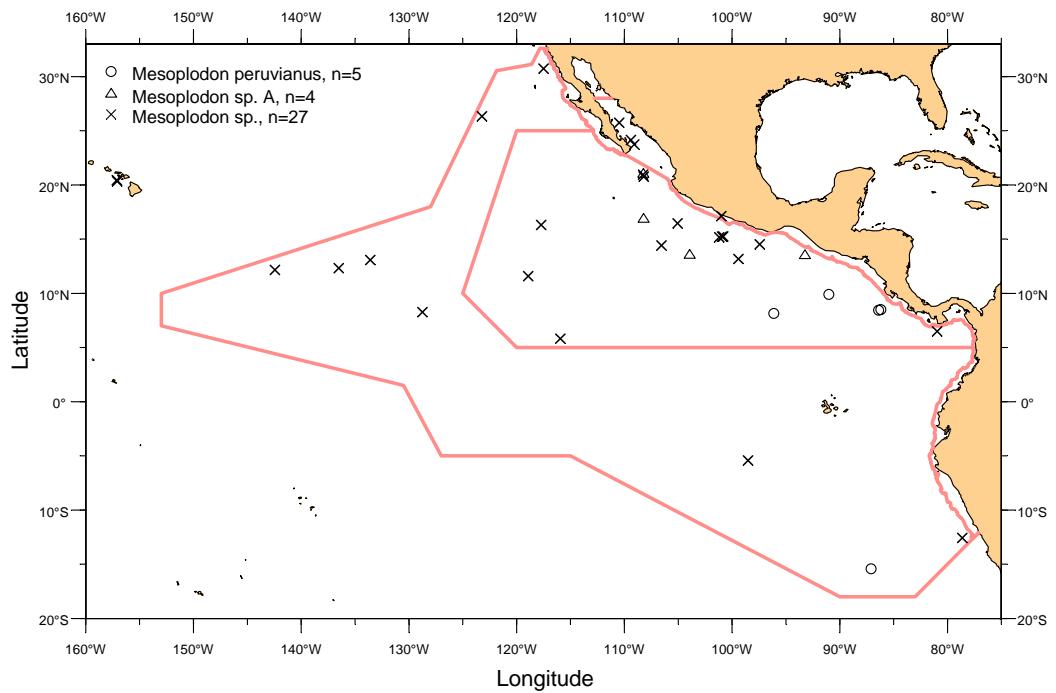


Figure 12. Beaked whale sightings of the genus *Mesoplodon* sightings, STAR03.

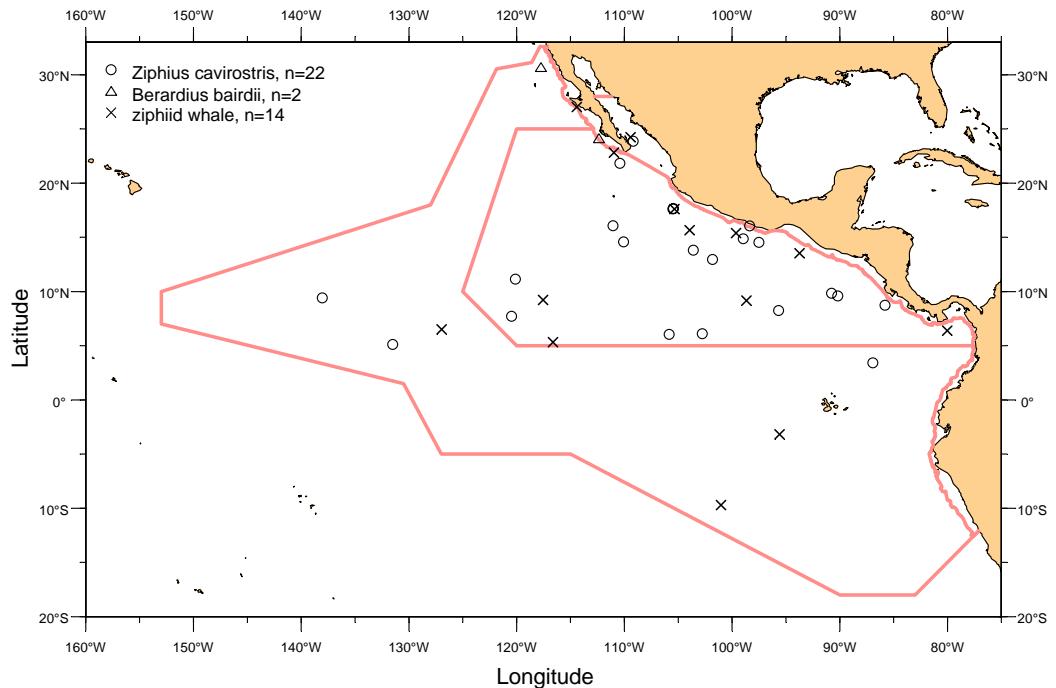


Figure 13. Cuvier's, Baird's and unident. Ziphid beaked whale sightings, STAR03.

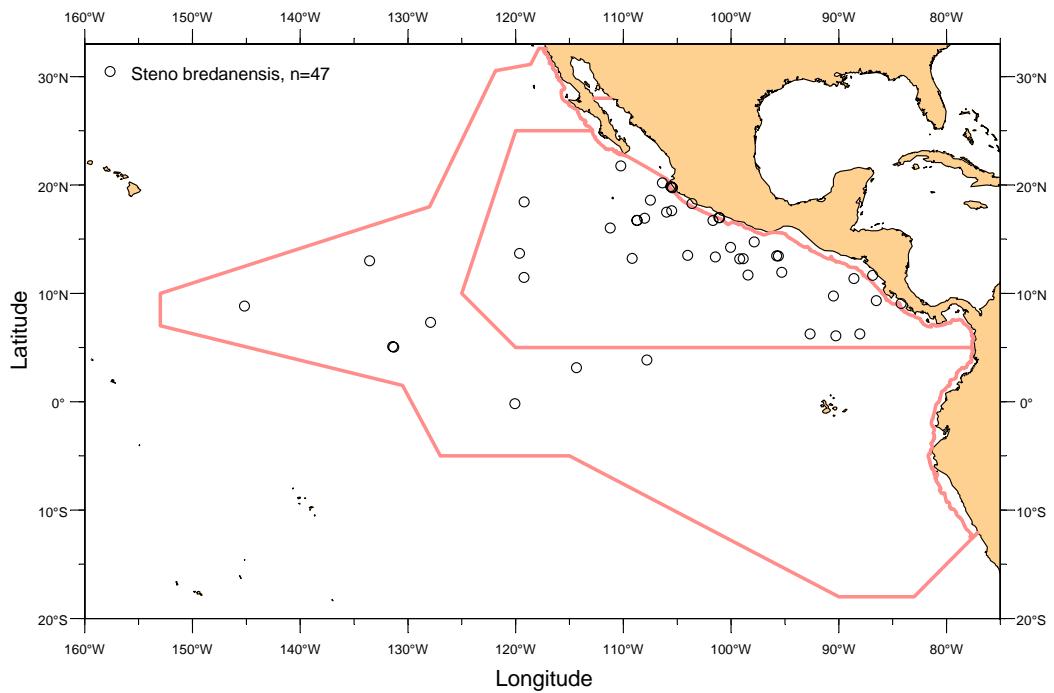


Figure 14. Rough-toothed dolphin sightings, STAR03.

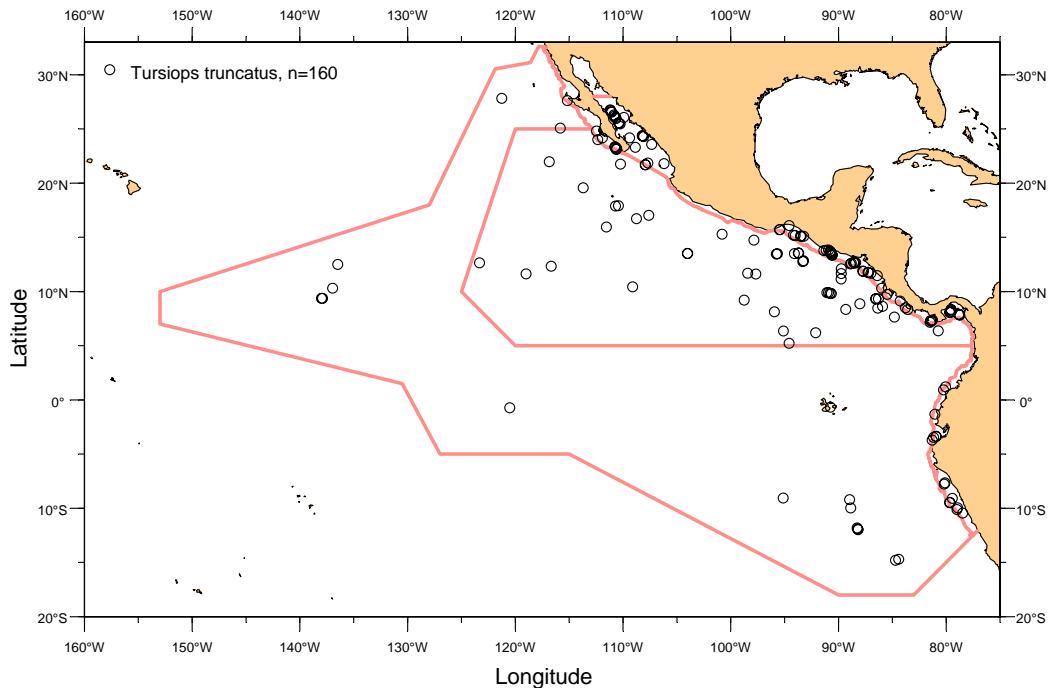


Figure 15. Bottlenose dolphin sightings, STAR03.

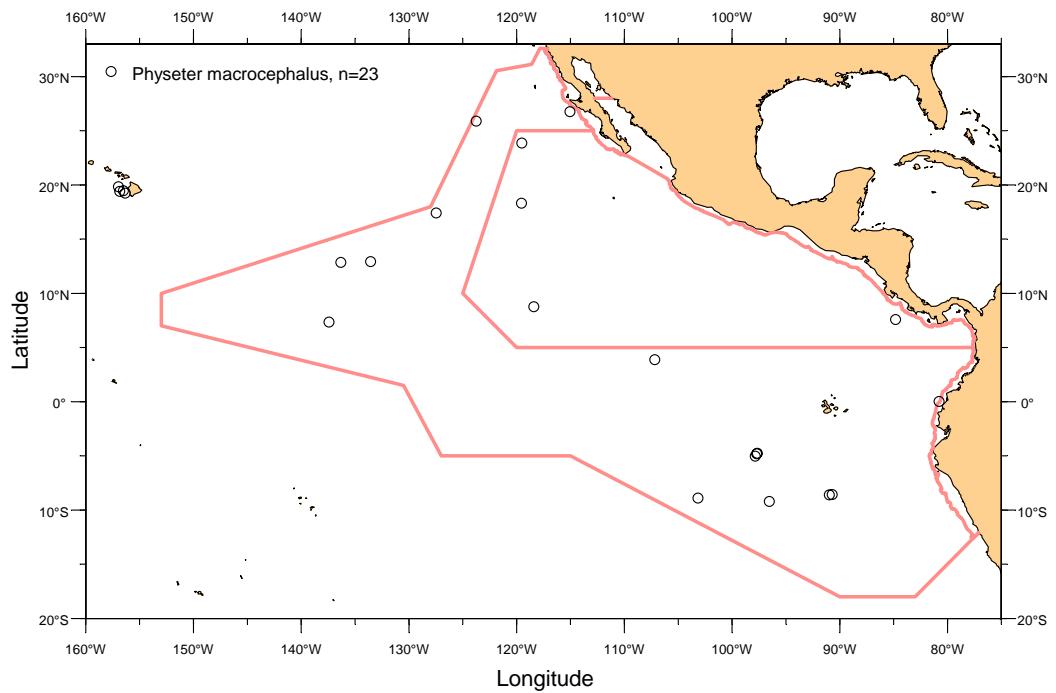


Figure 16. Sperm whale sightings, STAR03.

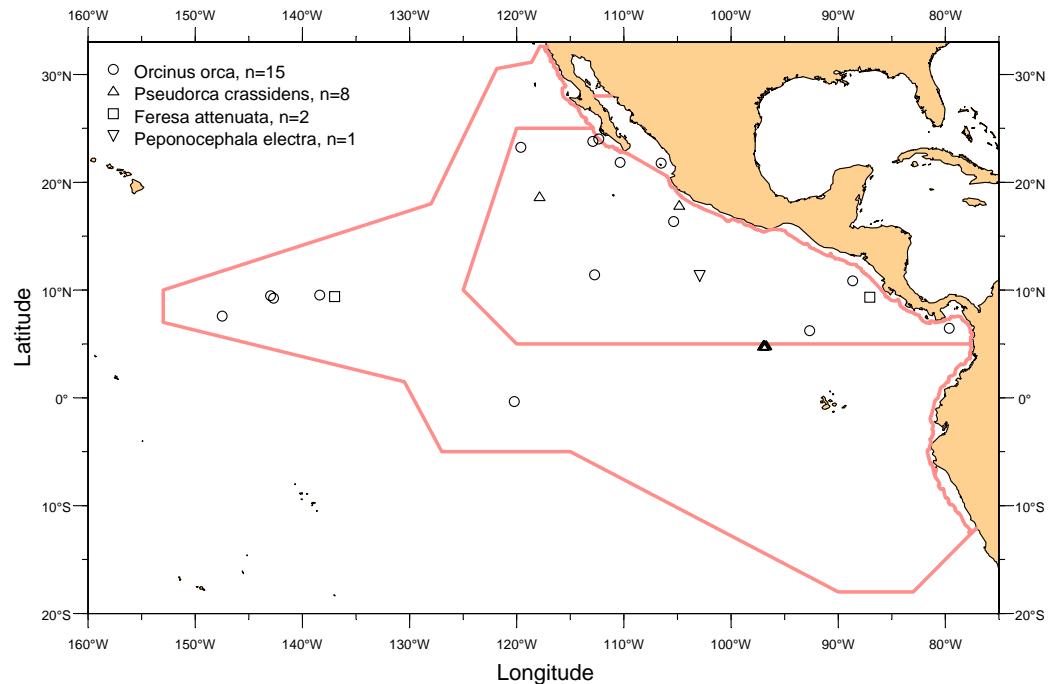


Figure 17. Killer, false killer, pygmy killer and melon-headed whales, STAR03.

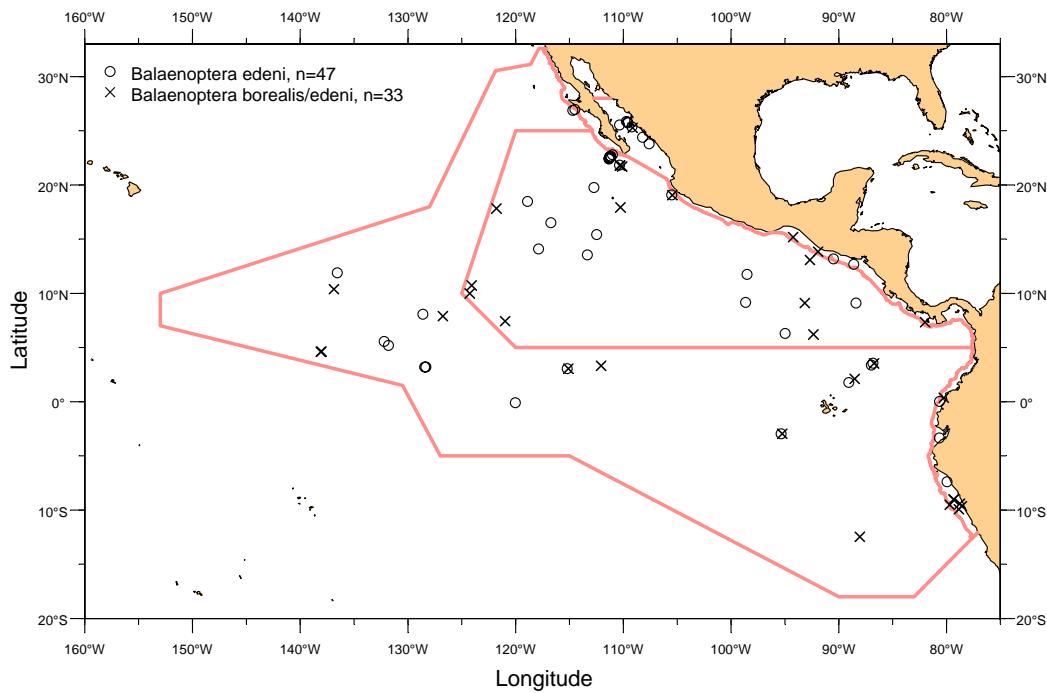


Figure 18. Bryde's and unidentified Sei/Bryde's whale sightings, STAR03.

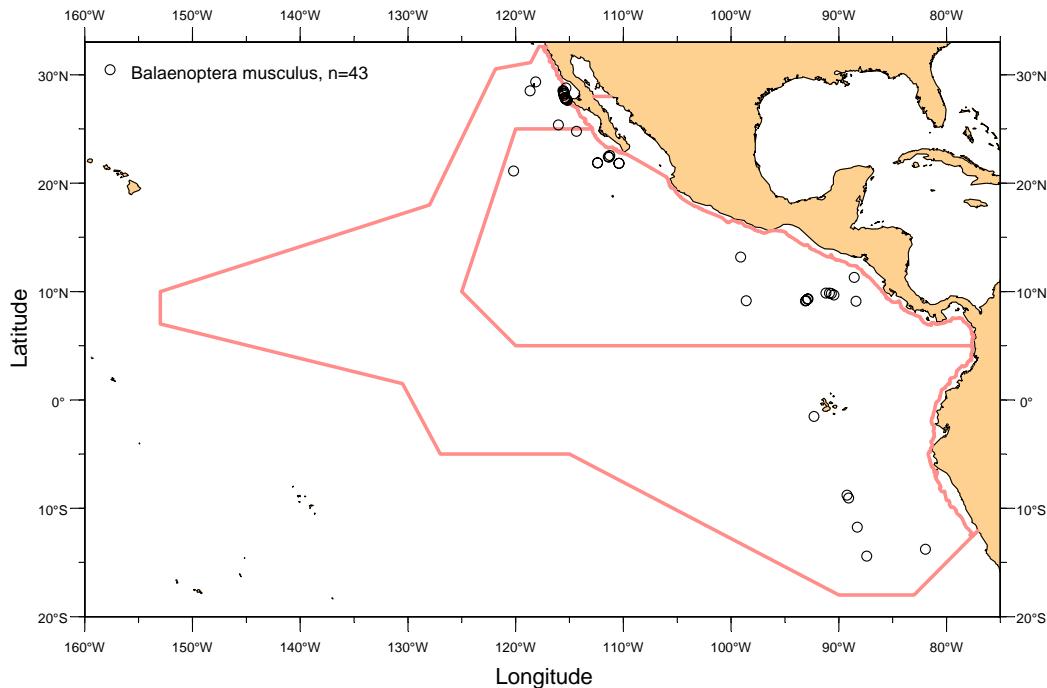


Figure 19. Blue whale sightings, STAR03.

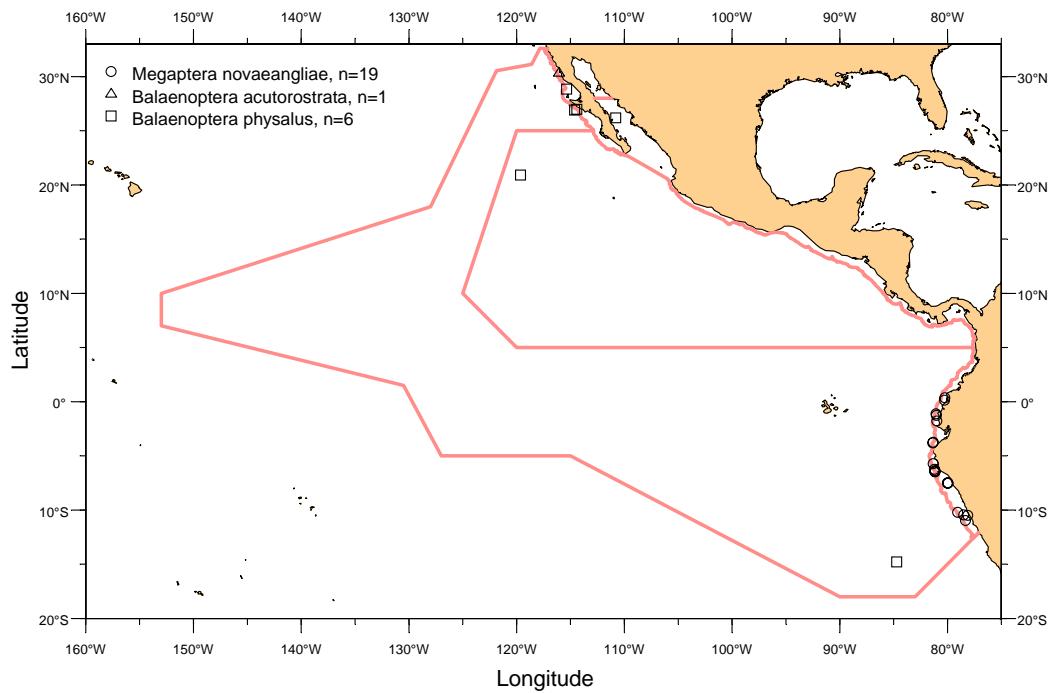


Figure 20. Humpback, minke and fin whale sightings, STAR03.

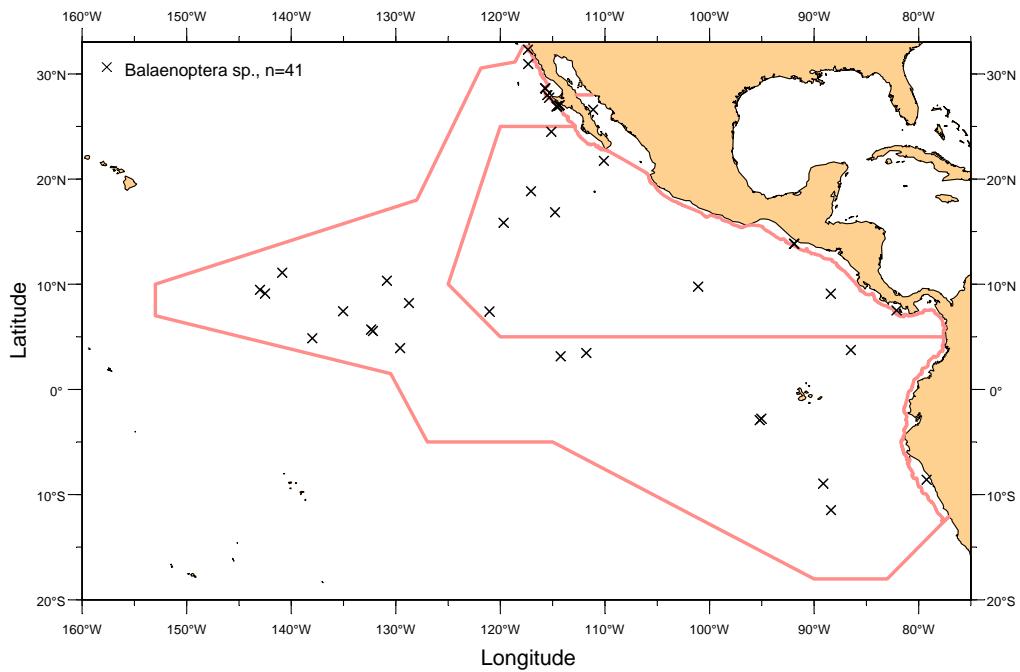


Figure 21. Baleen whale sightings not identified to species, STAR03.

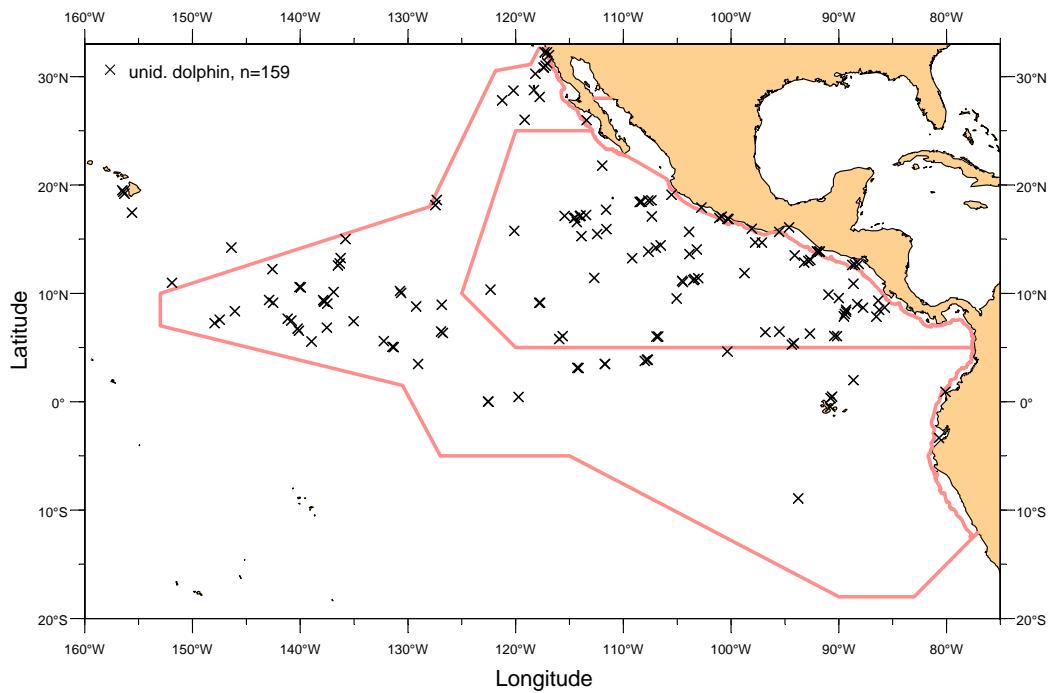


Figure 22. Unidentified dolphin sightings, STAR03.

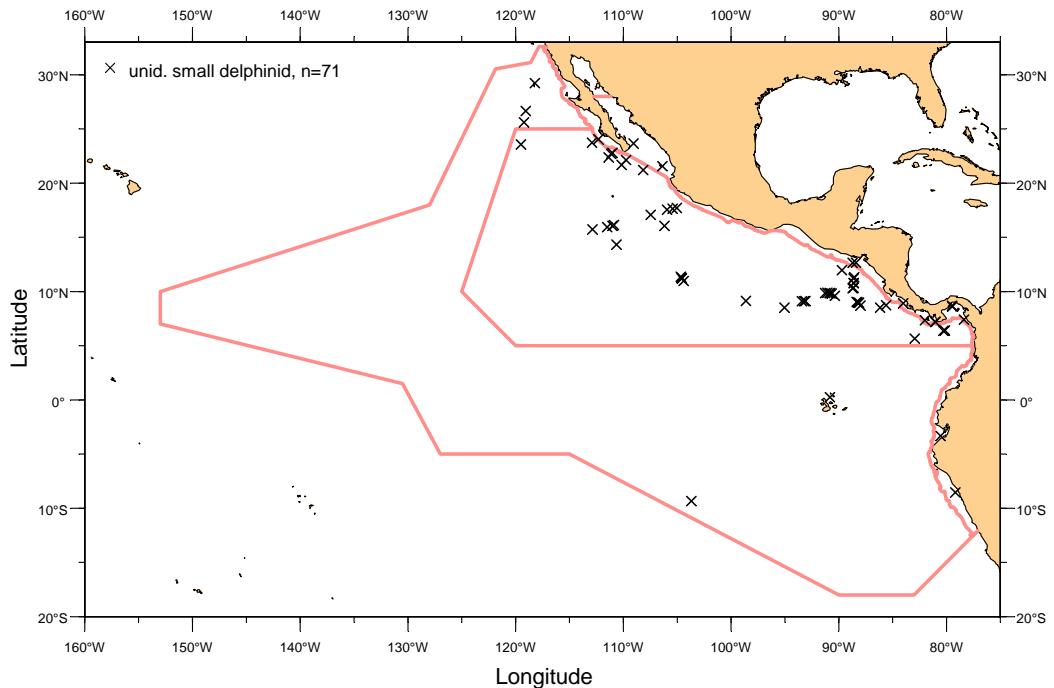


Figure 23. Unidentified small delphinids, STAR03.

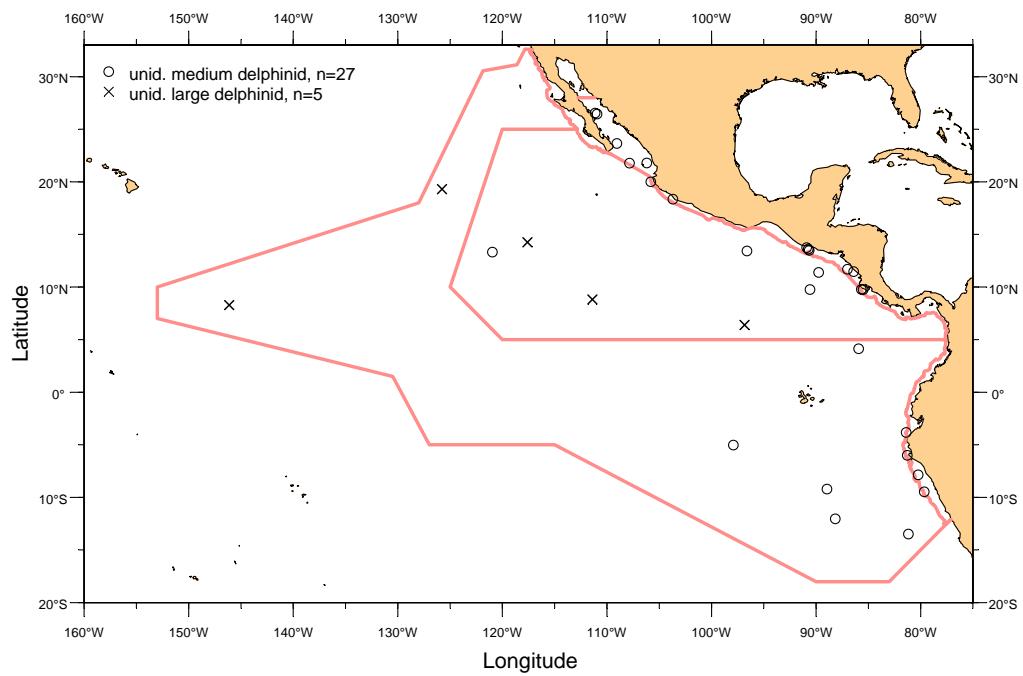


Figure 24. Unidentified medium- and large-sized delphinid sightings, STAR03.

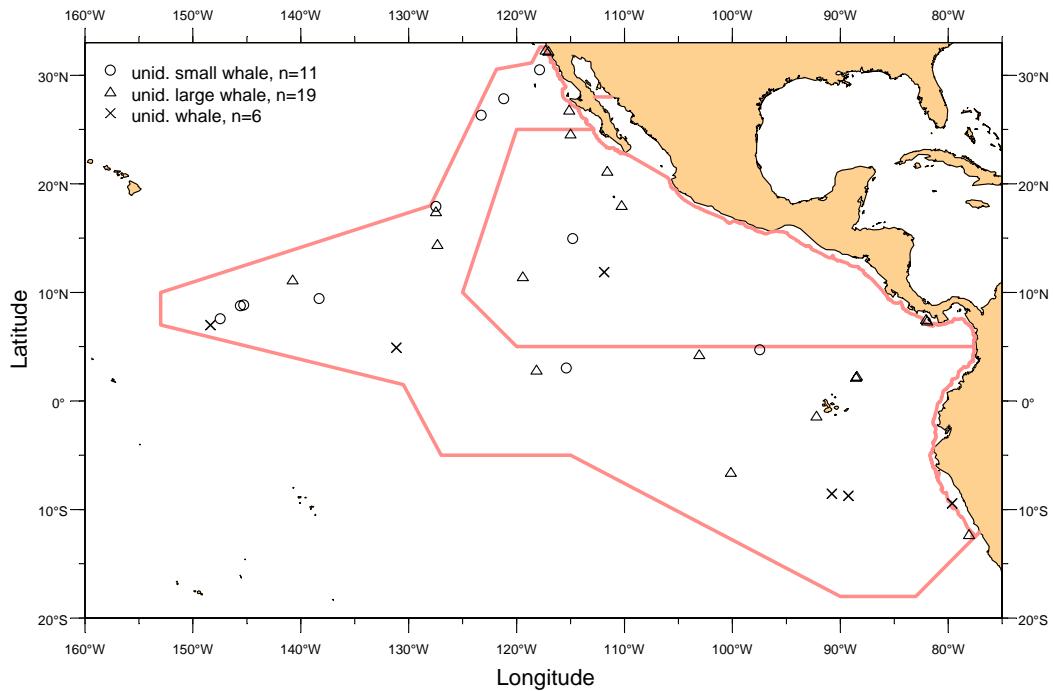


Figure 25. Unidentified small whale sightings, STAR03.

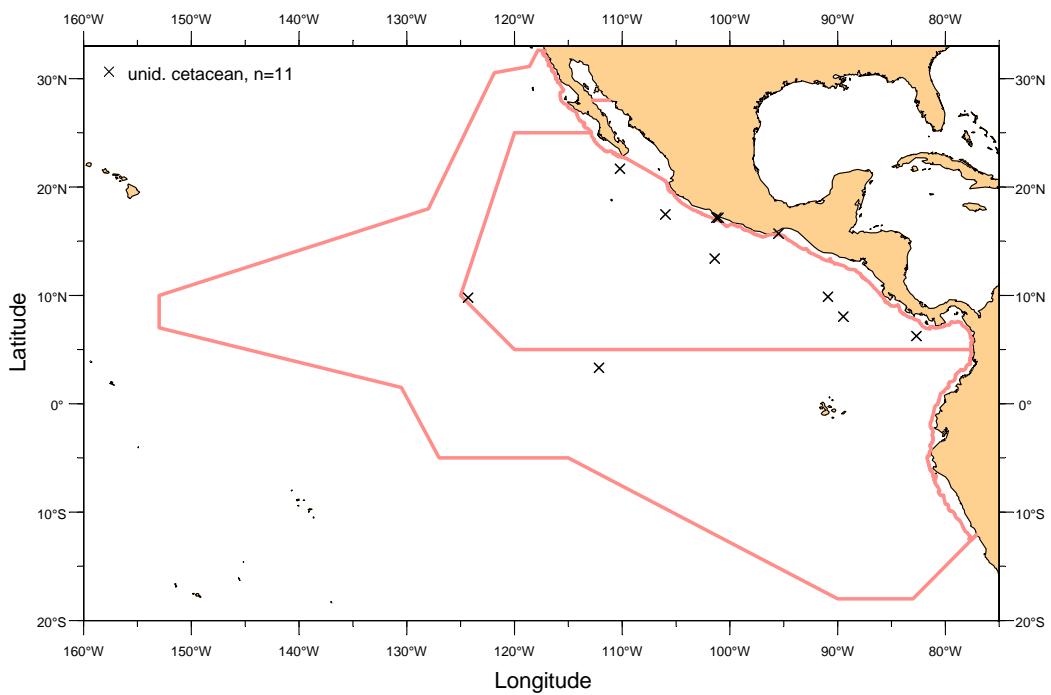


Figure 26. Unidentified cetacean sightings, STAR03.

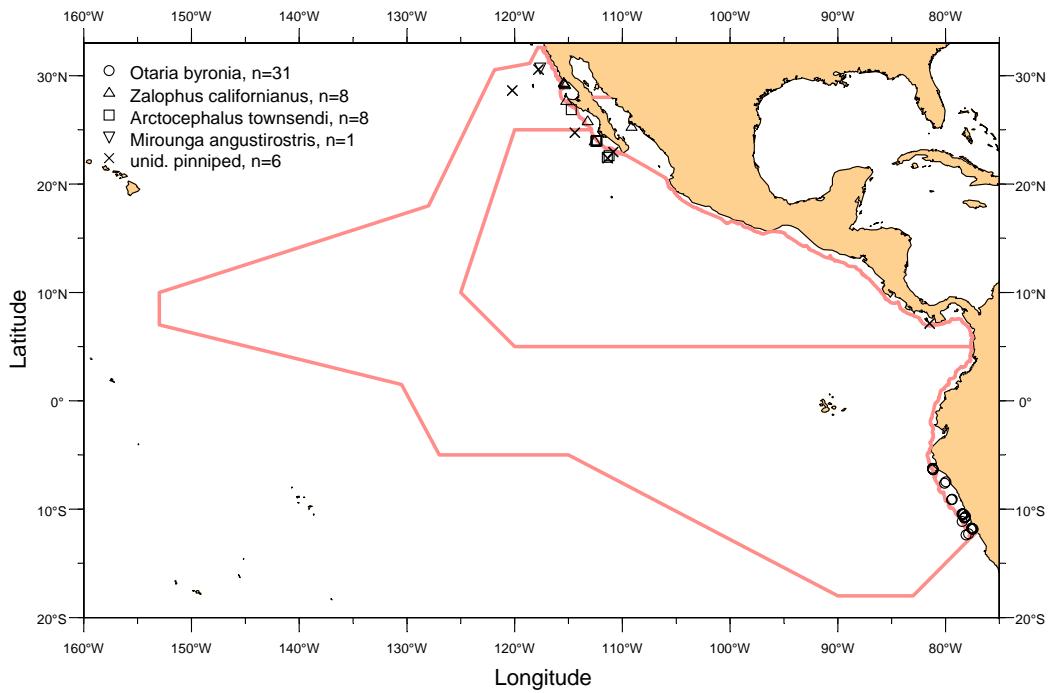


Figure 27. Sea lions, seals and unidentified pinniped sightings, STAR03.

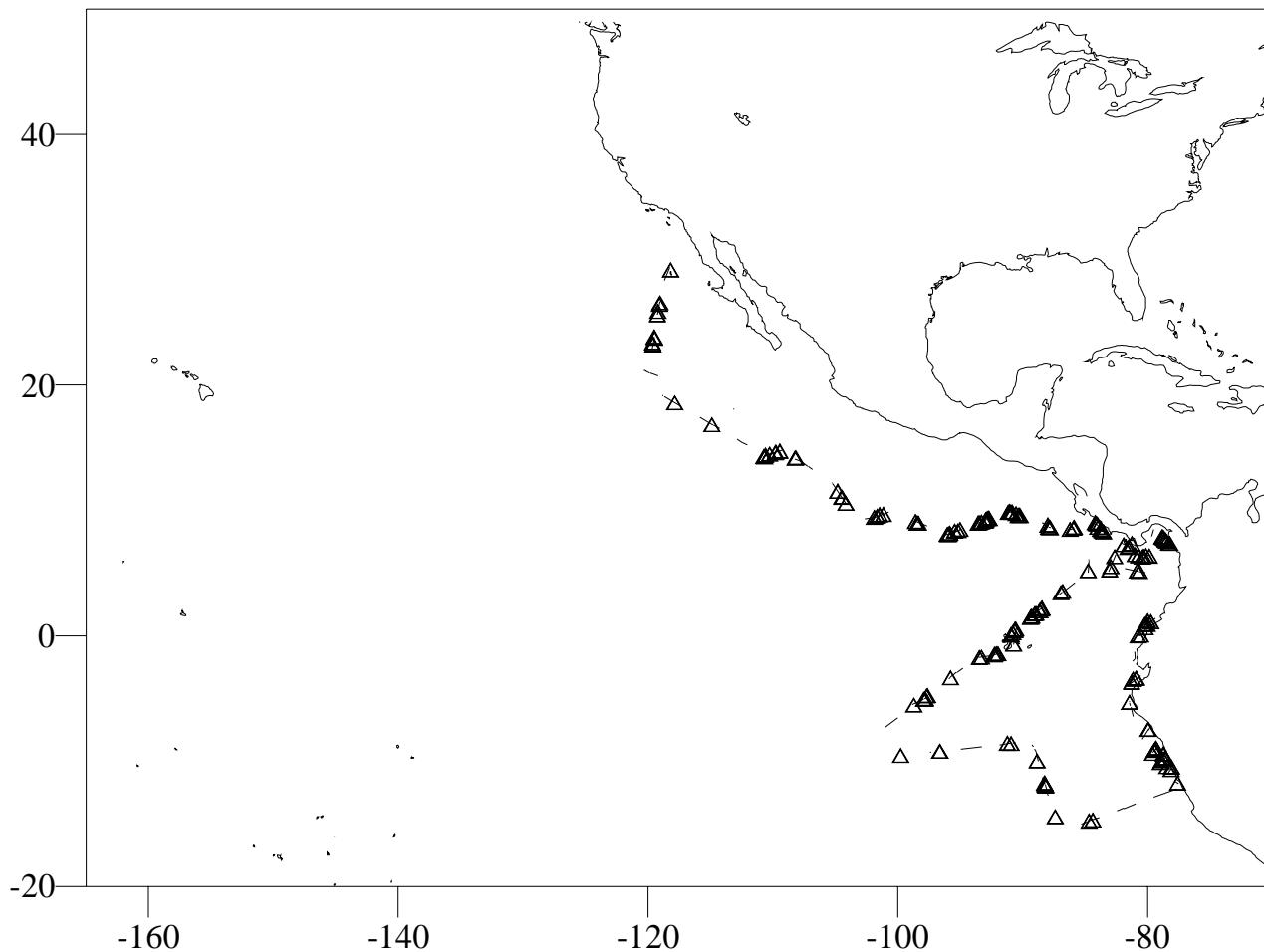


Figure 28. Acoustic survey effort using a towed hydrophone array (line segments), and locations where clear delphinid whistles of sighted animals were noted (triangles) during STAR03.

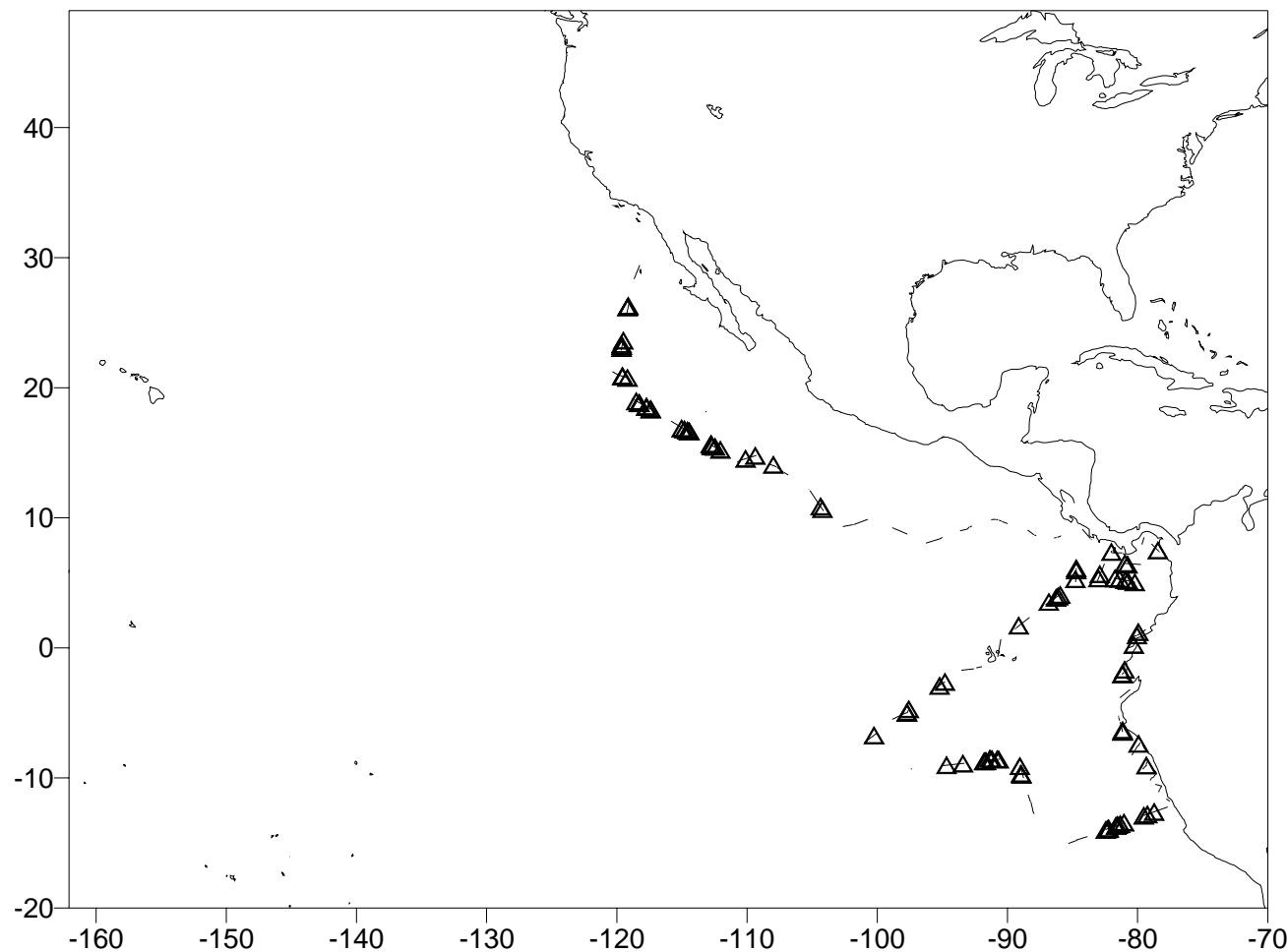


Figure 29. Acoustic survey effort using a towed hydrophone array (line segments), and locations where clear delphinid whistles of non-sighted animals were noted (triangles) during STAR03.

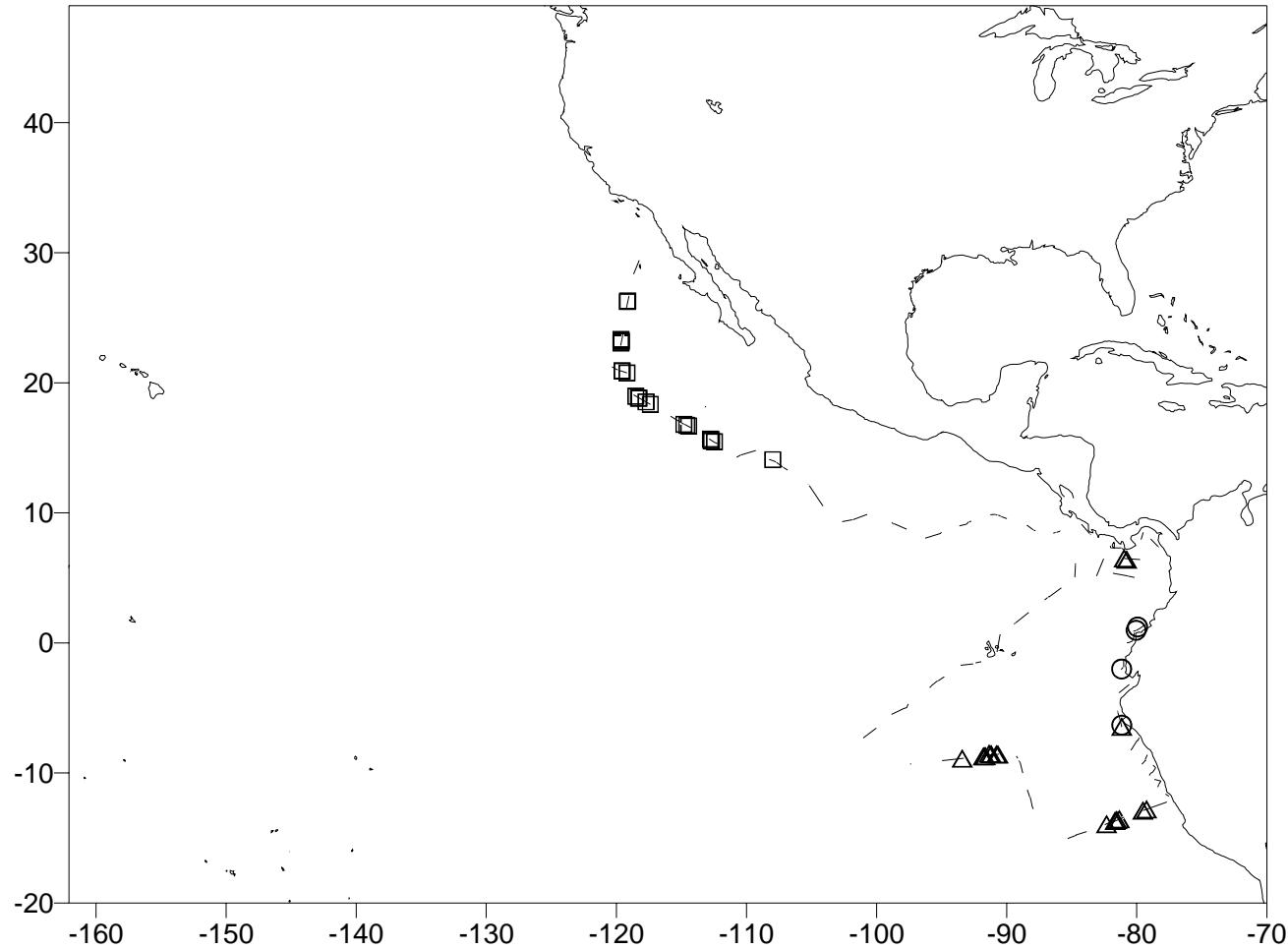


Figure 30. Acoustic survey effort using a towed hydrophone array (line segments), and locations where non-sighted sperm whale clicks (triangles), humpback whale calls (circles), and minke whale boings (squares) were detected during STAR03.

Appendix A. Study area boundary points for STAR03 survey. The eastern boundary is defined by the coastline of the Americas.

32° 32.12' N, 117° 7.34' W
32° 35.37' N, 117° 27.82' W
32° 37.61' N, 117° 49.52' W
31° 7.97' N, 118° 36.30' W
30° 32.52' N, 121° 52.00' W
18° 0.00' N, 128° 0.00' W
10° 0.00' N, 153° 0.00' W
7° 0.00' N, 153° 0.00' W
1° 30.00' N, 130° 30.00' W
5° 0.00' S, 127° 0.00' W
5° 0.00' S, 115° 0.00' W
18° 0.00' S, 90° 0.00' W
18° 0.00' S, 83° 0.00' W
12° 0.00' S, 77° 0.00' W

Strata Boundaries: The coastal stratum is inshore of the 1000 meter depth contour. The core stratum is defined by the following points:

25° 0.00' N, 112° 51.60' W
25° 0.00' N, 120° 0.00' W
10° 0.00' N, 125° 0.00' W
5° 0.00' N, 120° 0.00' W
5° 0.00' N, 77° 38.04' W

Appendix B. Participating scientists and the ship legs on which they sailed during STAR03.

Name	Observer Number	Position	Affiliation ¹	McArthur II					D.S. Jordan					
				1	2	3	4	5	1	2	3	4	5	6
Lisa Ballance	120	Cruise Leader	SWFSC	x							x	x		
Susan Chivers	029	Cruise Leader	SWFSC		x									
Tim Gerrodette	084	Cruise Leader	SWFSC			x								
Sarah Mesnick	159	Cruise Leader	SWFSC		x									
Robert Pitman	004	Cruise Leader/Visiting Sci	SWFSC				x		x	x	x	x	x	x
Barb Taylor	034	Cruise Leader	SWFSC			x								
Juan Carlos Salinas	126	Senior Mammal Observer	SWFSC		x	x	x	x	x	x	x			
James Cotton	007	Senior Mammal Observer	SWFSC	x	x							x	x	x
Gary Freidrichsen	001	Senior Mammal Observer	SWFSC	x	x							x	x	x
Richard Rowlett	073	Senior Mammal Observer	SWFSC		x	x	x	x	x	x	x			
Chris Cutler	228	Mammal Observer	SWFSC	x	x							x	x	x
Anne Douglas	199	Mammal Observer	SWFSC		x	x	x	x	x	x	x			
Holly Fearnbach	224	Mammal Observer	SWFSC		x	x	x	x	x	x	x			
Beth Goodwin	230	Mammal Observer	SWFSC	x	x							x	x	x
Erin LaBrecque	200	Mammal Observer	SWFSC		x	x	x	x	x	x	x			
Cornelia Oedekoven	208	Mammal Observer	SWFSC	x	x							x	x	x
Michael Richlen	233	Mammal Observer	SWFSC		x	x	x	x	x	x	x			
Ernesto Vazquez	125	Mammal Observer	SWFSC	x	x							x	x	x

¹ SIO--Scripps Institution of Oceanography, University of California, San Diego
STRI--Smithsonian Tropical Research Institute

IATTC--Inter-American Tropical Tuna Commission

CSULA--California State University, Los Angeles

BLM--Bureau of Land Management, U.S. Department of the Interior

UW--University of Washington

INOCAR--Instituto Oceanografico de la Armada

UP/CM--UNIPESCA, Ministry of Agriculture; and CEMA, San Carlos University

IMARPE--Instituto del Mar del Peru

AOC--Aircraft Operations Center, National Oceanic and Atmospheric Administration

Appendix B. Participating scientists (continued).

Name	Observer			Affiliation	<i>McArthur II</i>					<i>D.S. Jordan</i>						
	Number	Position	Affiliation		1	2	3	4	5	Leg No.	1	2	3	4	5	Leg No.
Katie Cramer		Photogrammetrist	SWFSC							x	x					
Erik Eilers		Photogrammetrist	SWFSC													x
Jim Gilpatrick	080	Photogrammetrist	SWFSC							x	x		x			
Morgan Lynn	057	Photogrammetrist	SWFSC							x		x		x		x
Paula Olson	092	Photogrammetrist	SWFSC							x						
Wayne Perryman	110	Photogrammetrist	SWFSC	x												
Charlie Stinchcomb	145	Photogrammetrist	SWFSC										x	x		
Carolina Bonin		Acoustician	SWFSC							x						
Jenna Borberg	222	Acoustician	SWFSC					x								
Megan Ferguson	217	Acoustician	SIO			x										
Julie Oswald	190	Acoustician	SIO							x						
Shannon Rankin	184	Acoustician	SWFSC		x	x										
Dawn Breese	232	Seabird Observer	SWFSC			x		x								
Michael Force	098	Seabird Observer	SWFSC	x	x	x	x	x	x							
Chris Hoefer	227	Seabird Observer	SWFSC			x				x	x	x				
Richard Pagen	231	Seabird Observer	SWFSC	x	x								x	x	x	x
Sophie Webb	229	Seabird Observer	SWFSC							x	x	x	x	x	x	x
Noelle Bowlin		Oceanographer	SWFSC													x
Ron Dotson		Oceanographer	SWFSC							x	x	x	x			
Dave Griffith		Oceanographer	SWFSC												x	x
Candice Hall		Oceanographer	SWFSC	x												
Melinda Kelley		Oceanographer	SWFSC		x	x	x	x	x							
Kerry Kopitsky		Oceanographer	SWFSC							x	x	x	x	x	x	
Richard Condit		Visiting Scientist	STRI			x										
Paul Fiedler	081	Visiting Scientist	SWFSC			x										
Josh Fluty	220	Visiting Scientist	SWFSC				x									
Jason Larese	247	Visiting Scientist	SWFSC				x									
Cleridy Lennert		Visiting Scientist	IATTC							x						
Phil Morin		Visiting Scientist	SWFSC			x										

Appendix B. Participating scientists (continued).

Name	Observer Number	Position	Affiliation	<i>McArthur II</i>					<i>D.S. Jordan</i>					
				1	2	3	4	5	1	2	3	4	5	6
Jessica Redfern	240	Visiting Scientist	SWFSC	x										
Mari Rosales		Visiting Scientist	CSULA		x									
Hadoram Shirihi		Visiting Scientist							x					
Larry Standley		Visiting Scientist	BLM		x									
Eric Ward		Visiting Scientist	UW	x										
Maria Elena Tapia		Ecuadorian Observer	INOCAR	x										
Ruben Lopez Bran		Guatemalan Observer	UP/CM					x						
Jose Carlos Marquez		Peruvian Observer	IMARPE					x						
David Demers		Helicopter Pilot	AOC				x	x				x	x	
Julie Helmers		Helicopter Pilot	AOC						x	x				
Glen Franke		Helicopter Mechanic	AOC			x	x				x	x		
Alvin Howard		Helicopter Mechanic	AOC					x	x					

Appendix C. SWFSC species, stocks and other sighting-categories of marine mammals, 2003.

Code	Genus/Taxa	Species/Stock	Common Names
001	<i>Mesoplodon</i>	<i>peruvianus</i>	Pygmy beaked whale
002	<i>Stenella</i>	<i>attenuata</i> (offshore)	Offshore pantropical spotted dolphin
003	<i>Stenella</i>	<i>longirostris</i> (unid. subsp.)	Unidentified spinner dolphin
004	<i>Stenella</i>	<i>clymene</i>	Clymene dolphin, short-snouted spinner dolphin
005	<i>Delphinus</i>	sp.	Unidentified common dolphin
006	<i>Stenella</i>	<i>attenuata graffmani</i>	Coastal spotted dolphin
007	<i>Sotalia</i>	<i>fluviatilis</i>	Tucuxi, Guiana dolphin
008	<i>Orcaella</i>	<i>brevirostris</i>	Irrawaddy dolphin, Lumbalumba
009	<i>Phocoena</i>	<i>dioptrica</i>	Spectacled porpoise
010	<i>Stenella</i>	<i>longirostris orientalis</i>	Eastern spinner dolphin
011	<i>Stenella</i>	<i>longirostris</i> hybrid	Whitebelly spinner dolphin
012	<i>Lagenorhynchus</i>	<i>albirostris</i>	White-beaked dolphin
013	<i>Stenella</i>	<i>coeruleoalba</i>	Striped dolphin, streaker porpoise, euphrosyne dolphin
014	<i>Lagenorhynchus</i>	<i>acutus</i>	Atlantic white-sided dolphin
015	<i>Steno</i>	<i>bredanensis</i>	Rough-toothed dolphin, Steno
016	<i>Delphinus</i>	<i>capensis</i>	Baja neritic common dolphin, long-beaked common dolphin
017	<i>Delphinus</i>	<i>delphis</i>	Offshore common dolphin, short-beaked common dolphin
018	<i>Tursiops</i>	<i>truncatus</i>	Bottlenose dolphin
019	<i>Cephalorhynchus</i>	<i>heavisidii</i>	Heaviside's dolphin
020	<i>Cephalorhynchus</i>	<i>hectori</i>	Hector's dolphin, pied dolphin, white front dolphin
021	<i>Grampus</i>	<i>griseus</i>	Risso's dolphin, gray grampus
022	<i>Lagenorhynchus</i>	<i>obliquidens</i>	Pacific white-sided dolphin
023	<i>Lagenorhynchus</i>	<i>australis</i>	Peale's dolphin, blackchin dolphin
024	<i>Lagenorhynchus</i>	<i>cruciger</i>	Hourglass dolphin
025	<i>Lagenorhynchus</i>	<i>obscurus</i>	Dusky dolphin
026	<i>Lagenodelphis</i>	<i>hosei</i>	Fraser's dolphin, Sarawak dolphin
027	<i>Lissodelphis</i>	<i>borealis</i>	Northern right whale dolphin
028	<i>Lissodelphis</i>	<i>peronii</i>	Southern right whale dolphin
029	<i>Cephalorhynchus</i>	<i>eutropia</i>	Black dolphin, Chilean dolphin
030	<i>Cephalorhynchus</i>	<i>commersonii</i>	Commerson's dolphin, piebald dolphin
031	<i>Peponocephala</i>	<i>electra</i>	Melon-headed whale
032	<i>Feresa</i>	<i>attenuata</i>	Pygmy killer whale
033	<i>Pseudorca</i>	<i>crassidens</i>	False killer whale
034	<i>Globicephala</i>	sp.	Unidentified pilot whale
035	<i>Globicephala</i>	<i>melas</i>	Long-finned pilot whale, Atlantic pilot whale

Appendix C. SWFSC species, stocks and other sighting-categories of marine mammals, 2003 (continued).

Code	Genus/Taxa	Species/Stock	Common Names
036	<i>Globicephala</i>	<i>macrorhynchus</i>	Short-finned pilot whale
037	<i>Orcinus</i>	<i>orca</i>	Killer whale
038	<i>Sousa</i>	<i>chinensis</i>	Indo-Pacific hump-backed dolphin,
039	<i>Sousa</i>	<i>teuszii</i>	Atlantic hump-backed dolphin
040	<i>Phocoena</i>	<i>Phocoena</i>	Harbor porpoise
041	<i>Phocoena</i>	<i>sinus</i>	Vaquita, Gulf of California harbor porpoise
042	<i>Phocoena</i>	<i>spinipinnis</i>	Burmeister's porpoise, black porpoise
043	<i>Neophocaena</i>	<i>phocaenoides</i>	Black finless porpoise
044	<i>Phocoenoides</i>	<i>dalli</i>	Dall's porpoise
045	<i>Delphinapterus</i>	<i>leucas</i>	White whale, beluga
046	<i>Physeter</i>	<i>macrocephalus</i>	Sperm whale
047	<i>Kogia</i>	<i>breviceps</i>	Pygmy sperm whale
048	<i>Kogia</i>	<i>sima</i>	Dwarf sperm whale
049	<i>Ziphiidae</i>		Unidentified beaked whale
050	<i>Hyperoodon</i>	<i>planifrons</i>	Southern bottlenose whale
051	<i>Mesoplodon</i>	sp.	Unidentified <i>Mesoplodon</i>
052	<i>Mesoplodon</i>	<i>carlhubbsi</i>	Hubb's beaked whale, archbeak whale
053	<i>Mesoplodon</i>	<i>hectori</i>	Hector's beaked whale
054	<i>Mesoplodon</i>	<i>bowdoini</i>	Andrew's beaked whale, deepcrest whale
055	<i>Mesoplodon</i>	<i>europaeus</i>	Gervais' beaked whale, Antillean beaked whale
056	<i>Mesoplodon</i>	<i>bidens</i>	Sowerby's beaked whale
057	<i>Mesoplodon</i>	<i>ginkgodens</i>	Ginkgo-toothed beaked whale
058	<i>Mesoplodon</i>	<i>grayi</i>	Gray's beaked whale
059	<i>Mesoplodon</i>	<i>densirostris</i>	Blaineville's beaked whale, dense-beaked beaked whale
060	<i>Mesoplodon</i>	<i>layardii</i>	Strap-toothed whale
061	<i>Ziphius</i>	<i>cavirostris</i>	Cuvier's beaked whale, goose-beaked whale
062	<i>Berardius</i>	<i>arnuxii</i>	Arnoux's beaked whale, southern giant bottlenose whale
063	<i>Berardius</i>	<i>bairdii</i>	Baird's beaked whale, northern giant bottlenose whale
064	<i>Tasmacetus</i>	<i>shepherdi</i>	Shepherd's beaked whale
065	<i>Indopacetus</i>	<i>pacificus</i>	Longman's beaked whale
066	<i>Eubalaena</i>	<i>japonica</i>	North Pacific right whale
067	<i>Balaena</i>	<i>mysticetus</i>	Bowhead whale
068	<i>Caperea</i>	<i>marginata</i>	Pygmy right whale
069	<i>Eschrichtius</i>	<i>robustus</i>	Gray whale
070	<i>Balaenoptera</i>	sp.	Unidentified rorqual

Appendix C. SWFSC species, stocks and other sighting-categories of marine mammals, 2003 (continued).

Code	Genus/Taxa	Species/Stock	Common Names
071	<i>Balaenoptera</i>	<i>acutorostrata</i>	Common minke whale
072	<i>Balaenoptera</i>	<i>edeni</i>	Bryde's whale
073	<i>Balaenoptera</i>	<i>borealis</i>	Sei whale
074	<i>Balaenoptera</i>	<i>physalus</i>	Fin whale
075	<i>Balaenoptera</i>	<i>musculus</i>	Blue whale
076	<i>Megaptera</i>	<i>novaehollandiae</i>	Humpback whale
077	unid. dolphin		Unidentified dolphin or porpoise
078	unid. small whale		Unidentified small whale
079	unid. large whale		Unidentified large whale
080	<i>Kogia</i>	<i>sima/breviceps</i>	Unidentified <i>Kogia</i> (dwarf or pygmy sperm whale)
081	<i>Mesoplodon</i>	<i>stejnegeri</i>	Steinger's beaked whale, sabertooth, Bering Sea beaked whale
082	<i>Mesoplodon</i>	<i>mirus</i>	True's Beaked Whale
083	<i>Mesoplodon</i>	sp. A	Unnamed beaked whale
084	<i>Hyperoodon</i>	<i>ampullatus</i>	Northern Bottlenose, North Atlantic bottlenose whale
085	<i>Monodon</i>	<i>monoceros</i>	Narwhal, sea unicorn
086	<i>Eubalaena</i>	<i>australis</i>	Southern right whale
087	<i>Pontoporia</i>	<i>blainvilliei</i>	Franciscana, La Plata dolphin
088	<i>Stenella</i>	<i>longirostris centroamericana</i>	Central American spinner dolphin, Costa Rican spinner dolphin
089	<i>Stenella</i>	<i>attenuata/plagidion</i>	Unidentified spotted dolphin in Atlantic
090	<i>Stenella</i>	<i>attenuata</i> (unid. subsp.)	Unidentified pantropical spotted dolphin
091	<i>Stenella</i>	<i>frontalis</i>	Atlantic spotted dolphin
092	<i>Platanista</i>	<i>gangetica gangetica</i>	Ganges river dolphin
093	<i>Platanista</i>	<i>gangetica minor</i>	Indus river dolphin
094	<i>Inia</i>	<i>geoffrensis</i>	Boto, Amazon river dolphin
095	<i>Lipotes</i>	<i>vexillifer</i>	Baiji, Chinese river dolphin, whitefin dolphin
096	unid. cetacean		Unidentified cetacean
097	unid. object		Unidentified object, possible marine mammal
098	unid. whale		Unidentified whale
099	<i>Balaenoptera</i>	<i>borealis/edeni</i>	Rorqual identified as a Sei or Bryde's whale
100	<i>Stenella</i>	<i>longirostris</i>	Tres Marias spinner dolphin
101	<i>Stenella</i>	<i>longirostris</i>	Southwestern spinner dolphin
102	<i>Stenella</i>	<i>longirostris</i>	Gray's spinner dolphin, pantropical spinner dolphin
103	<i>Stenella</i>	<i>longirostris</i>	Undetermined eastern or Central American spinner dolphin
177	unid. small delph.		Unidentified <i>Delphinus/Lagenorhynchus/Lissodelphis/Stenella</i>
277	unid. medium delph.		Unidentified Feresa/Grampus/Steno/Tursiops

Appendix C. SWFSC species, stocks and other sighting-categories of marine mammals, 2003 (continued).

Code	Genus/Taxa	Species/Stock	Common Names
377	unid. large delph.		Unidentified Pseudorca/Orca/ <i>Globicephala</i>
477			Unidentified porpoise (<i>Phocoena</i> or <i>Phocoenoides</i>)
AA	<i>Arctocephalus</i>	<i>australis</i>	South American fur seal
AG	<i>Arctocephalus</i>	<i>galapagoensis</i>	Galapagos fur seal
AT	<i>Arctocephalus</i>	<i>townsendi</i>	Guadalupe fur seal
CU	<i>Callorhinus</i>	<i>ursinus</i>	Northern fur seal
EJ	<i>Eumetopias</i>	<i>jubatus</i>	Stellar sea lion
MA	<i>Mirounga</i>	<i>angustirostris</i>	Northern elephant seal
OB	<i>Otaria</i>	<i>byronia</i>	South American sea lion
PU	unid.	pinniped	Unidentified Pinniped
PV	<i>Phoca</i>	<i>vitulina</i>	Harbor seal
UA	unid. fur seal		Unidentified fur seal
UO	unid. sea lion		Unidentified sea lion
US	unid. seal		Unidentified seal
ZC	<i>Zalophus</i>	<i>californianus</i>	California sea lion